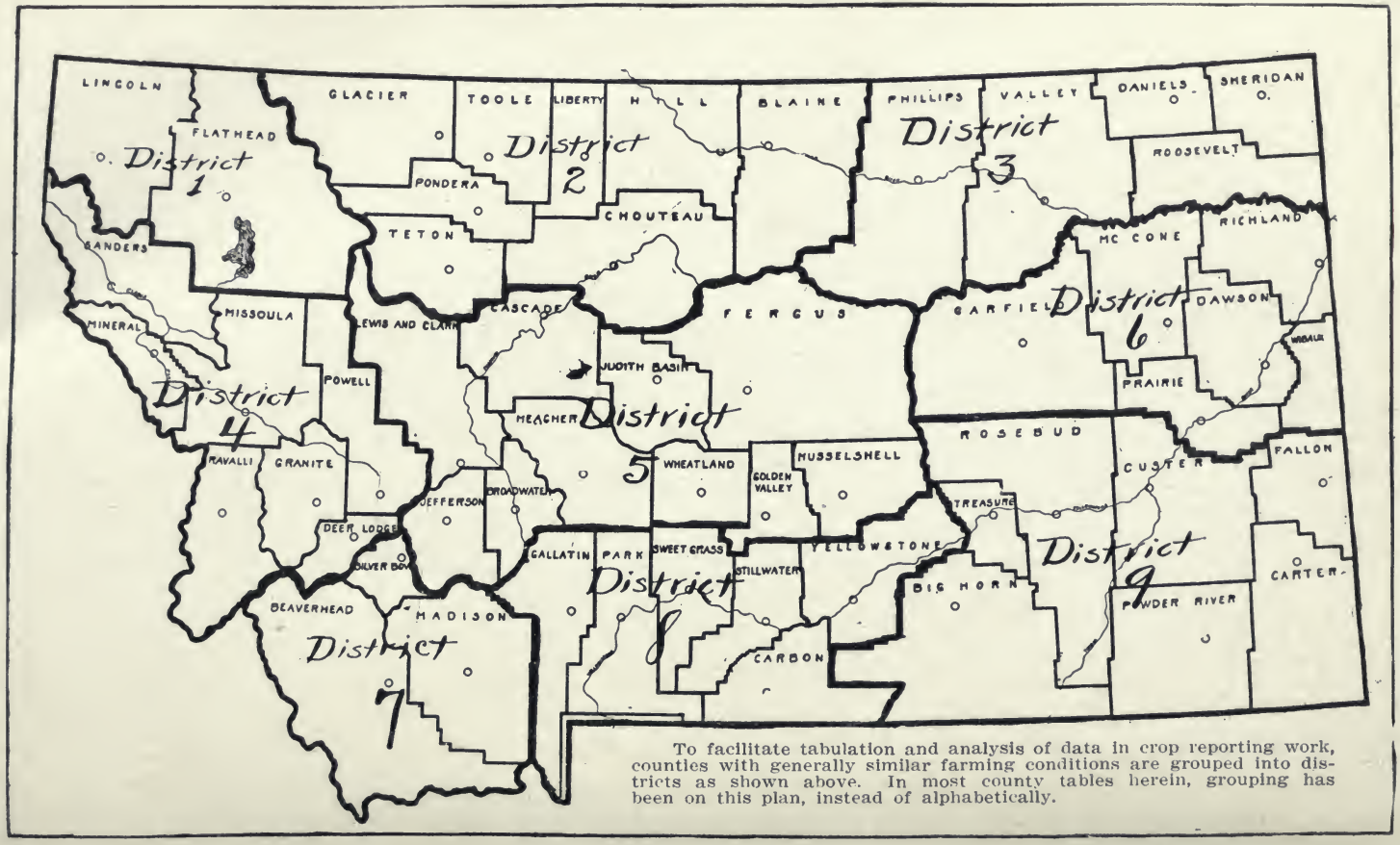
S
338.105
45mF
1923

STATE DOCUMENTS

MONTANA FARM REVIEW VOL. 2

MONTANA STATE LIBRARY
930 East Lyndale Avenue
Helena, Montana

MONTANA CROP REPORTING DISTRICTS



To facilitate tabulation and analysis of data in crop reporting work, counties with generally similar farming conditions are grouped into districts as shown above. In most county tables herein, grouping has been on this plan, instead of alphabetically.

SEP 4 19[illegible]
3 0864 1004 5711 1
Montana State Library

MONTANA FARM REVIEW

FOR 1923

VOLUME 2

Issued by

THE MONTANA COOPERATIVE CROP REPORTING SERVICE

GEORGE A. SCOTT, Agricultural Statistician,
HELENA, MONTANA.

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL ECONOMICS
Washington, D. C.

H. C. TAYLOR, Chief of Bureau

and

MONTANA STATE DEPARTMENT OF AGRICULTURE
Helena, Montana

CHESTER C. DAVIS, Commissioner

Co-operating.

JOINT BULLETIN

This Publication is Issued and Circulated by Authority of the State of Montana.

FOREWORD

Volume 1 of the MONTANA FARM REVIEW contains a historical sketch of the state's agriculture, together with compilations of the records of crop and livestock production as far back as available, while this and succeeding volumes contemplate only information for the last current year, with some comparative data.

The information herein contained has been collected and compiled by the Montana Co-operative Crop Reporting Service, which is the Montana unit of the Division of Crop and Livestock Estimates, Bureau of Agricultural Economics, United States Department of Agriculture, co-operating with the Montana State Department of Agriculture, and with the Extension Service of the Montana State College.

Except where otherwise noted, the figures given are estimates of this Division of the United States Department of Agriculture. These data are based chiefly upon monthly information submitted by more than three thousand voluntary reporters, the annual farm census taken by the county assessors, records of the movement of farm and range produce submitted by railroads, supplemented by information from many other sources. To these individuals and agencies must be given the credit for making possible the collection of data on Montana's agriculture.

The figures showing the farm values of crops produced and the total values of livestock on hand must not be interpreted to mean the net wealth produced by the farmers and stockmen, nor the amount of cash received, but should be viewed in a relative sense.

In accordance with established practice, the estimates of crop acreages and production for 1923 are subject to final revision in December, 1924. Livestock numbers for January 1, 1924, are likewise subject to revision in January, 1925.

The MONTANA FARM REVIEW itself is widely distributed and is intended to serve as an accurate, uncolored source of information concerning Montana's agricultural production; the geographic range and distribution of crops and livestock; and the trend of changes that are now taking place in agriculture within this state. From it those who are interested or who hope to become interested in agriculture in Montana can secure dependable information on what the state grows, and where and in what quantity its production is found.

CHESTER C. DAVIS,
Commissioner of Agriculture.

GEORGE A. SCOTT,
Agricultural Statistician.

LIVESTOCK

The trends and shifts in livestock production in the state that were in evidence in 1922 continued in more pronounced fashion during 1923. There was a very heavy liquidation in beef cattle, a continued expansion in sheep, and still larger proportionate gains in milk cows, hogs, poultry, and bees, while the cash income from horses was very small compared with several years ago. Grass on ranges was generally abundant, and a large supply of feeds was raised.

(See tables for information as to numbers, values, gross receipts, etc.)

Beef Cattle Beef cattle production, the leading branch of the livestock industry in Montana, met with severe reverses again in 1923, in the form of low market values for range cattle, local financial difficulties which would not permit of further extensions of much needed credit, and comparatively high production costs. Most cattle went on summer ranges in good shape, and ranges were for the most part excellent throughout the season, while the supplies of winter feeds produced were more than adequate for normal requirements. But growers found it necessary to sacrifice many stock cows, calves, and much immature stuff. As a result more cattle were shipped from the state in 1923 than in any other year in the history of the state, except 1918 and 1919, when grass and feed crops were short, and prices very favorable. On the whole, cattlemen are yet in a distressed financial condition, although a ray of hope is seen now and then, and those who have been able thus far to stay in the business hope for an improvement in 1924. The mild winter of 1923-'24 enabled stockmen to winter their herds at about minimum expense and still maintain them in generally splendid shape. More cattle were fattened on corn and other feeds in the state in 1923 than usual, which is encouraging; but it will probably be some time before any considerable percentage of the annual output of cattle is fattened before shipment to markets.

Sheep The production of sheep and wool continued on the upgrade during 1923. Both lambs and wool brought a profit to the growers. The sheep industry is also carrying a heavy burden of debt, but the two favorable years just passed have enabled the sheepman to strengthen his financial holds. There was a moderate expansion in numbers of sheep in the state last year, but many owners found it expedient to sell practically all of their ewe lambs. The 1923 wool clip was quite generally satisfactory both as to quality and weight. It seems that sheepmen are drifting away from the custom of contracting their clips in advance of or at shearing time, and are selling more wool through local pools and associations, largely on a consignment basis.

Hogs The increase in hog production gained momentum in 1923, which is in line with state-wide diversification tendencies. This expansion was by far the most pronounced in the corn-growing counties. At the end of the year there were as many hogs in the state as ever before, if not more. Most of our hogs are used locally and by packing establishments within the state. The bulk of the shipments out of the state go to markets to the west of us.

Bees and Honey Montana leads all the states in average production of surplus honey per colony over the ten-year period 1913-1921, with an average yield of 82 pounds per colony. Wyoming stands second with an average of 80 pounds, and the average for the entire country for the same period is 46.4 pounds. In 1923 the average yield of honey per colony in Montana was 118 pounds, which was exceeded by North Dakota, but compares with the United States 1923 average of 39.1 pounds.

A steady and healthy expansion in apiculture is in progress. The 1920 census showed about 12,000 colonies then in the state, and the estimated number of colonies for 1923 is 17,000. The estimated income from honey and wax in 1923 was $170,000.

Horses Little interest was manifest in the raising of horses during 1923, due to very slow demand and low values. Only about enough breeding was done to maintain numbers; but for light losses on the ranges, there probably would have been a substantial decrease in numbers.

Poultry Montana farmers are raising more poultry than ever before. The last census showed that about three and one-quarter million chickens were raised in the state in 1919, and more than eleven and four-fifths million dozen of eggs produced. The receipts from the sales of chickens and eggs in 1919 amounted to $2,160,209. In 1923 about 3,500,000 chickens were raised, and over sixteen million dozen of eggs produced. The receipts from sales of chickens and eggs for this year are estimated to be $2,591,000.

Prices received for poultry and eggs have generally been unsatisfactory during 1923. Local demands are easily satisfied. More attention is being given to the marketing side of the enterprise, and the State Department of Agriculture has recently established grades for eggs, and, in cooperation with the Extension Department of the State College, has devised a workable plan for producers to have their eggs officially graded at shipping point. The application of such a system should aid in eliminating from market channels many eggs of inferior quality, greatly improve the average quality of eggs marketed, and insure better prices to the producer.

Turkey raising expanded greatly in 1923, most of the increase taking place in the counties east of the Divide. The climatic conditions of Montana and the feeds grown here are important factors favoring the production of turkeys. Much progress was made in marketing the turkey crop, through demonstrations in dressing and grading turkeys, conducted over the state by the State College Extension Service, by the market news service handled by the State Department, and by the functioning of several cooperative marketing associations. Prices received for turkeys were mostly very unsatisfactory. The estimated gross farm income from turkeys in 1923 was $473,000.

Milk Cows and Dairying Commercial dairying in Montana has received great impetus within the last two years. From 1919 to 1922 inclusive, the increase in the output of dairy products within the state was not so rapid. The increase in 1922 over 1919 was about 40% in creamery butter, the output of cheese decreased, and ice cream remained nearly stationary. The year 1923 showed an increase of over 50% in the output of creamery butter over any previous year. Reports from most of the creameries for the first three months of 1924 show an increase of about 10% over the same period of 1923 in the production of creamery butter. There are sixty-five creameries now in operation in Montana, or fifteen more than in 1919. Four county cow-testing associations are reported as organized and functioning on April 1, 1924. Considerable advance registry work is being done by the owners of purebred herds of the Guernsey, Jersey, Holstein and Brown Swiss breeds. Many dairy cattle are being brought into Montana from outside of the state and a constantly increasing number of farmers are turning to dairying as the principal part of their agricultural operations. A much larger number, however, are limiting their dairy operations, milking enough cows to furnish a sufficient income for current expenses in the home, and making it a part of their plan for diversification of their agricultural activities.

Best estimates obtainable for the production of dairy products in 1924 would indicate an increase of at least 25% in the production of creamery butter over 1923 with a substantial increase in the production of cheese, and the production of ice cream remaining about stationary. It seems at this time, from best sources of information obtainable, that prices for creamery butter will hardly remain at the level of 1923.

NUMBERS AND VALUES OF MONTANA LIVESTOCK ON FARMS AND RANGES (1920-1924)

Montana Livestock on Farms & Ranges		Total Number	Average Value	Total Value
Horses:	Jan. 1, 1924	643,000	$31.00	$19,933,000
	Jan. 1, 1923	643,000	38.00	24,434,000
	Jan. 1, 1922	670,000	41.00	27,470,000
	Jan. 1, 1921	669,000	50.00	33,450,000
	Jan. 1, 1920	669,000	61.00	40,809,000
Mules:	Jan. 1, 1924	9,000	55.00	495,000
	Jan. 1, 1923	9,000	60.00	540,000
	Jan. 1, 1922	9,000	69.00	621,000
	Jan. 1, 1921	9,000	87.00	783,000
	Jan. 1, 1920	9,000	92.00	828,000
Milk Cows:	Jan. 1, 1924	194,000	53.00	10,282,000
	Jan. 1, 1923	173,000	55.00	9,515,000
	Jan. 1, 1922	160,000	58.00	9,280,000
	Jan. 1, 1921	156,000	75.00	11,700,000
	Jan. 1, 1920	153,000	83.00	12,799,000
Other Cattle:	Jan. 1, 1924	1,222,000	27.60	33,727,000
	Jan. 1, 1923	1,273,000	30.90	39,336,000
	Jan. 1, 1922	1,260,000	27.20	34,272,000
	Jan. 1, 1921	1,080,000	35.40	38,232,000
	Jan. 1, 1920	1,116,000	46.80	54,288,000
All Cattle:	Jan. 1, 1924	1,416,000	31.08	44,009,000
	Jan. 1, 1923	1,446,000	33.78	48,851,000
	Jan. 1, 1922	1,420,000	30.60	43,552,000
	Jan. 1, 1921	1,236,000	44.78	49,932,000
	Jan. 1, 1920	1,269,000	52.85	67,087,000
Sheep:	Jan. 1, 1924	2,370,000	8.70	20,619,000
	Jan. 1, 1923	2,270,000	8.70	19,749,000
	Jan. 1, 1922	2,270,000	4.70	10,669,000
	Jan. 1, 1921	1,973,000	5.80	11,443,000
	Jan. 1, 1920	2,083,000	10.40	21,663,000
Swine:	Jan. 1, 1924	270,000	11.20	3,024,000
	Jan. 1, 1923	225,000	13.20	2,970,000
	Jan. 1, 1922	180,000	13.10	2,358,000
	Jan. 1, 1921	160,000	16.50	2,640,000
	Jan. 1, 1920	167,000	20.00	3,340,000

TOTAL VALUES OF ABOVE CLASSES OF LIVESTOCK IN MONTANA:

Jan. 1, 1924	$ 88,080,000
Jan. 1, 1923	96,544,000
Jan. 1, 1922	84,671,000
Jan. 1, 1921	98,248,000
Jan. 1, 1920	133,727,000

MONTANA WOOL PRODUCTION

	1919	1920	1921	1922	1923
Wool Produced (thousands of pounds)	18,267	16,000	16,400	16,770	17,775
Montana's Rank with other States	3d	5th	5th	4th	3d

MONTANA CALF AND LAMB CROPS, AND LOSSES OF CATTLE AND SHEEP

Year	Calf Crop[1] Per Cent	Lamb Crop[1] Per Cent	Cattle Losses[2] Per Cent	Sheep Losses[2] Per Cent
1922	69	75	9	11
1923	70	73	6	6

[1] Based upon number of cows and ewes of breeding age on hand at the beginning of the year.
[2] Based upon the total number of cattle and sheep on hand at the beginning of the year.

NUMBERS OF HORSES, CATTLE AND SHEEP BY COUNTIES.

(As shown by Assessors to State Board of Equalization, 1923)

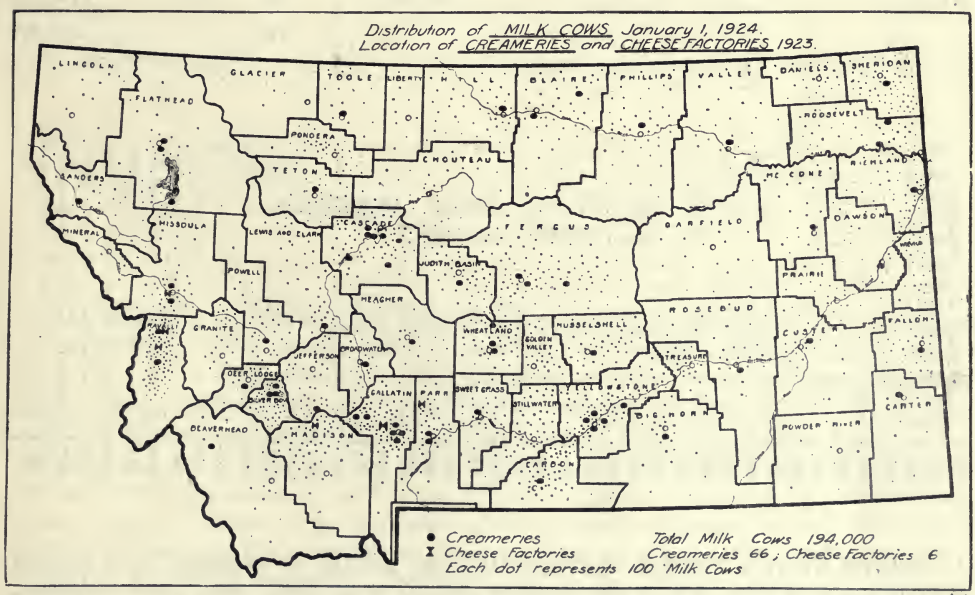
District and County	All Horses	All Cattle	All Sheep
NORTHWESTERN DISTRICT			
Flathead	4,004	9,014	3,287
Lincoln	1,817	2,676	76
Lake	4,581	8,119	1,256
NORTH CENTRAL DISTRICT			
Blaine	15,829	36,655	103,458
Chouteau	16,146	25,982	35,281
Glacier	5,421	17,669	23,475
Hill	11,689	13,667	13,960
Liberty	4,422	5,954	5,988
Pondera	11,899	13,564	15,632
Teton	9,784	19,435	32,081
Toole	6,093	6,379	26,919
NORTHEASTERN DISTRICT			
Daniels	10,221	10,352	3,668
Phillips	19,223	25,946	50,120
Roosevelt	10,028	13,878	900
Sheridan	14,651	18,636	7,683
Valley	27,794	28,276	65,446
WEST CENTRAL DISTRICT			
Deer Lodge	1,383	4,810	5,366
Granite	3,287	11,254	8,933
Mineral	559	718	14
Missoula	3,113	9,123	1,667
Powell	3,984	16,263	90,416
Ravalli	5,727	19,347	18,895
Sanders	2,836	9,332	2,826
CENTRAL DISTRICT			
Broadwater	4,511	14,676	25,250
Cascade	10,375	29,875	74,386
Fergus	25,994	52,016	49,201
Golden Valley	5,754	11,114	11,004
Jefferson	3,941	14,448	1,953
Judith Basin	7,578	25,319	32,632
Lewis & Clark	5,250	28,676	64,162
Meagher	4,993	22,551	128,689
Musselshell	6,604	12,600	9,029
Wheatland	5,469	22,870	60,200
EAST CENTRAL			
Dawson	15,406	20,034	10,928
Garfield	16,329	22,455	52,850
McCone	17,956	18,048	27,734
Prairie	10,936	13,404	10,127
Richland	14,927	18,202	1,501
Wibaux	6,054	7,496	2,513
SOUTHWESTERN DISTRICT			
Beaverhead	12,594	81,413	156,346
Madison	9,271	36,608	115,457
Silver Bow	1,926	6,072	7,270
SOUTH CENTRAL DISTRICT			
Carbon	8,485	18,120	24,501
Gallatin	10,796	21,394	16,048
Park	6,231	22,614	45,735
Stillwater	8,801	20,040	26,937
Sweet Grass	5,817	23,531	76,856
Yellowstone	12,160	19,732	38,246
SOUTHEASTERN DISTRICT			
Big Horn	7,274	60,001	12,123
Carter	11,828	26,313	75,704
Custer	10,779	28,038	29,514
Fallon	9,598	13,751	8,679
Powder River	12,790	44,809	20,762
Rosebud	9,497	22,931	57,461
Treasure	2,727	7,866	7,437
STATE TOTALS	497,142	1,114,066	1,798,582

DIVERSIFICATION SIGNS—About 160,000 acres more land were devoted to intertilled crops in Montana in 1923 than in the previous year. The acreage growing strictly feed crops in 1923 was 216,000 acres greater than in 1922. The number of milk cows in the state increased 12 per cent in 1923, and the number of hogs 20 per cent. A big increase in the number of turkeys raised was noted, and more chickens and eggs were produced than ever before. A part of the increase in the numbers of sheep in the state was due to the establishment of more farm flocks.

MILK COWS BY COUNTIES.

Estimated numbers, January 1, 1924.

County	Number of Milk Cows
Flathead	5,000
Lincoln	1,300
Lake	2,200
Blaine	4,200
Chouteau	4,000
Glacier	400
Hill	4,800
Liberty	900
Pondera	3,800
Teton	3,400
Toole	1,500
Daniels	2,700
Phillips	4,700
Roosevelt	4,300
Sheridan	6,800
Valley	2,900
Deer Lodge	1,400
Granite	2,600
Mineral	400
Missoula	5,000
Powell	3,300
Ravalli	9,000
Sanders	2,200
Broadwater	2,200
Cascade	6,000
Fergus	9,400
Golden Valley	2,700
Jefferson	4,000
Judith Basin	4,200
Lewis & Clark	3,800
Meagher	1,900
Musselshell	4,000
Wheatland	3,800
Dawson	3,500
Garfield	1,800
McCone	1,600
Prairie	2,100
Richland	5,300
Wibaux	3,000
Beaverhead	2,000
Madison	4,700
Silver Bow	3,800
Carbon	4,800
Gallatin	7,600
Park	4,000
Stillwater	4,400
Sweet Grass	3,200
Yellowstone	8,400
Big Horn	2,400
Carter	1,000
Custer	3,000
Fallon	3,300
Powder River	800
Rosebud	2,700
Treasure	1,800
STATE TOTAL	194,000



LIVESTOCK GRAZED ON NATIONAL FORESTS—For the year 1922, the U. S. Forest Service reports that 644,000 head of sheep and over 165,000 head of cattle and horses were grazed on the National Forests in Montana.

MANUFACTURED DAIRY PRODUCTS.

(Data supplied by Dairy Division, Montana Department of Agriculture.)

Year	Number of Creameries Operating	Butter Made (pounds)	Number of Cheese Factories Operating	Cheese Made (pounds)	Ice Cream Made (gallons)
1921	53	7,464,679	5	158,559	481,160
1922	57	7,815,847	5	188,889[2]	355,041[4]
1923	66	10,721,595[1]	6	250,000[3]	711,762[5]

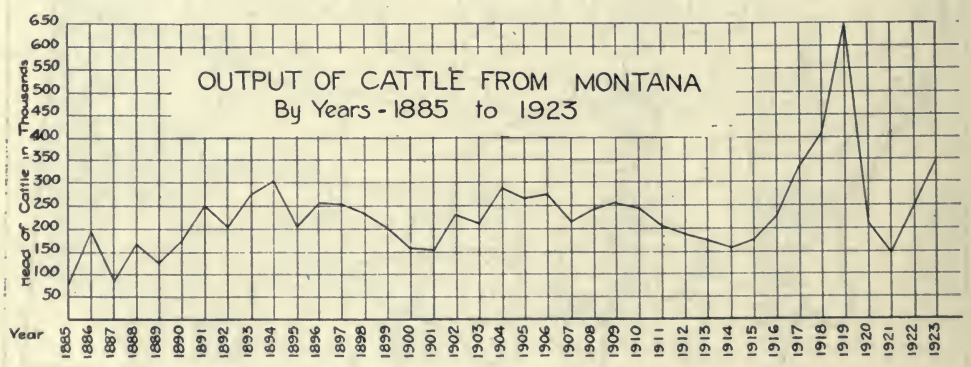
[1] Estimated about 50,000 pounds were not reported.
[2] Reports of cheese manufactured for 1922 were very incomplete.
[3] Reports incomplete.
[4] Estimated that only about one-half of Ice Cream manufactured was reported for 1922.
[5] Probably about 100,000 gallons not reported.

CATTLE SHIPMENTS FROM MONTANA.

(Data furnished by Secretary of Livestock Commission of Montana.)

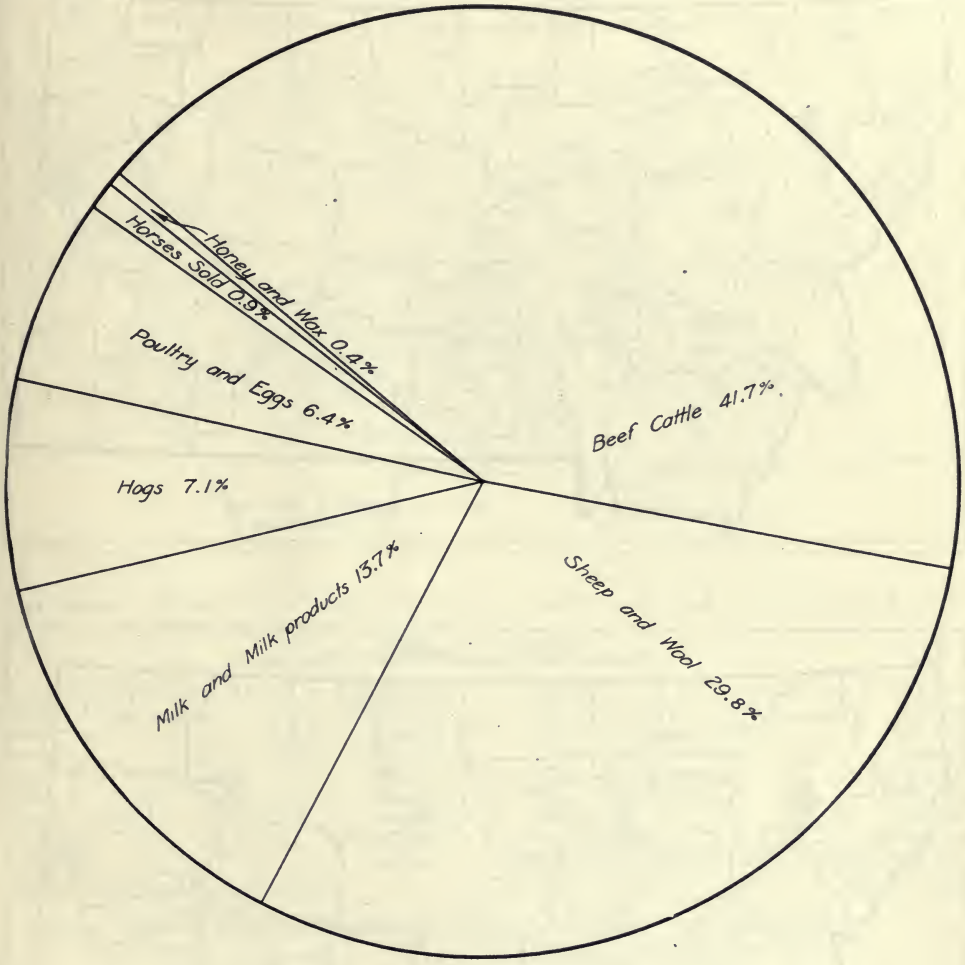
	Average Number of head shipped out
1885-1894	ave. 10 yrs. 168,117
1895-1904	ave. 10 yrs. 219,000
1905-1914	ave. 10 yrs. 222,496
1915-1923	ave. 9 yrs. 303,366

	Number of head shipped out
1919	641,337
1920	211,242
1921	147,413
1922	246,000
1923	342,687



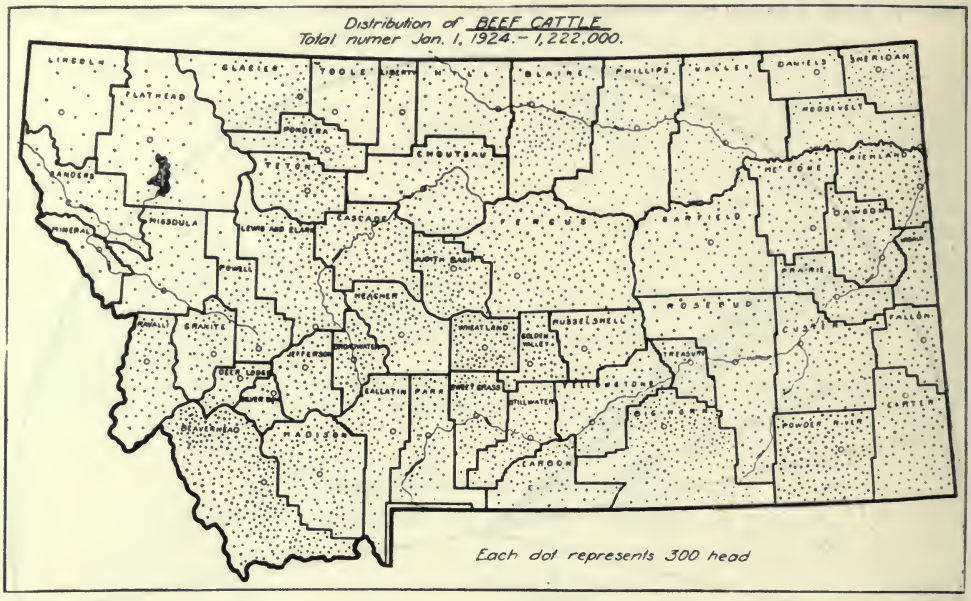
CROPS GROWN UNDER IRRIGATION—The acreage of irrigated lands devoted to tame and wild hays exceeds the combined acreage of all other crops under irrigation. More than 90 per cent of the wheat acreage is not irrigated. Less than one-fifth of the oats acreage, about one-third of the barley acreage, and a small percentage of the corn acreage, are under irrigation. Sugar beets for sugar are grown only under irrigation, and this is largely true for seed peas.

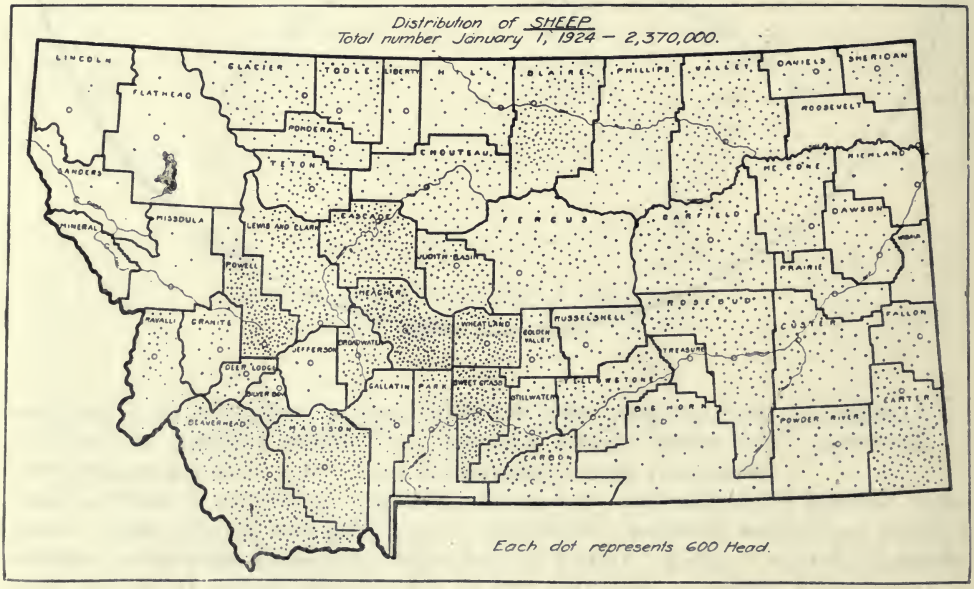
Relative Farm Receipts from the Sale of Montana Livestock and Livestock Products for 1923.



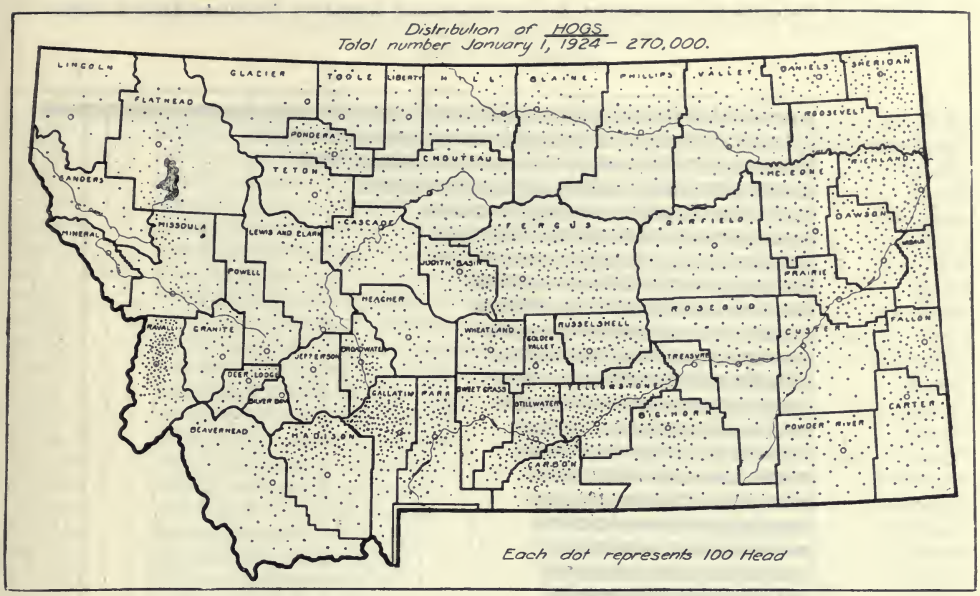
Livestock Reporting

Stockmen have asked the Department of Agriculture for a long time for current reports regarding the livestock situation, so that they might have definite information upon which to base necessarily frequent decisions concerning time of marketing, whether to increase or decrease their holdings, and related problems. Accordingly, late in 1922 this Division began issuing monthly reports on livestock. In this work advance estimates are made of the supplies of the different classes of stock that will be available for market at various times from different sections of the country; monthly reports are issued on the condition of stock and ranges in the seventeen western range states, and on feed supplies in various sections; and other items of value and interest are covered briefly, in order that stockmen may have a general view of the livestock situation over the entire country. These reports are based mainly upon information received direct from thousands of stockmen, from records of rail movements, and from several other sources.





IRRIGATED AREA IN MONTANA—The Montana Irrigation Commission, in 1920, reported 2,136,974 acres of land actually irrigated, with 885,543 acres more to be irrigated soon under plans or works completed at that time. The Commission estimated that an additional 2,266,000 acres were feasible of irrigation. The irrigated area within the state is steadily being enlarged by the completion of new projects, and by the extension and improvement of many older ones.



ESTIMATED GROSS FARM RECEIPTS FROM MONTANA FARMS AND RANCHES, 1923.

INCOME FROM CROPS SOLD:

Winter wheat	$ 8,200,000	Apples	$ 445,000
Spring wheat	27,838,000	Beans	880,000
Oats	1,510,000	Peas (seed & canning)	506,000
Barley	161,000	Alfalfa seed	210,000
Rye	190,000	Misc. seed crops	50,000
Flax	1,496,000	Truck crops sold	300,000
Corn	400,000	Misc. fruits	70,000
Hay	3,930,000	Sugar beets	2,725,000
Potatoes	940,000	Wood products sold (from farms)	550,000

TOTAL INCOME FROM CROPS.....$50,401,000

(Estimated total farm value of all crops prdouced in 1923, $95,917,000)

INCOME FROM LIVESTOCK AND LIVESTOCK PRODUCTS SOLD:

Cattle (for meat)	$20,930,000
Sheep and lambs	7,117,000
Wool	7,643,000
Milk and milk products	6,753,000
Hogs	3,600,000
All poultry and eggs	3,153,000
Horses	400,000
Honey and wax	170,000

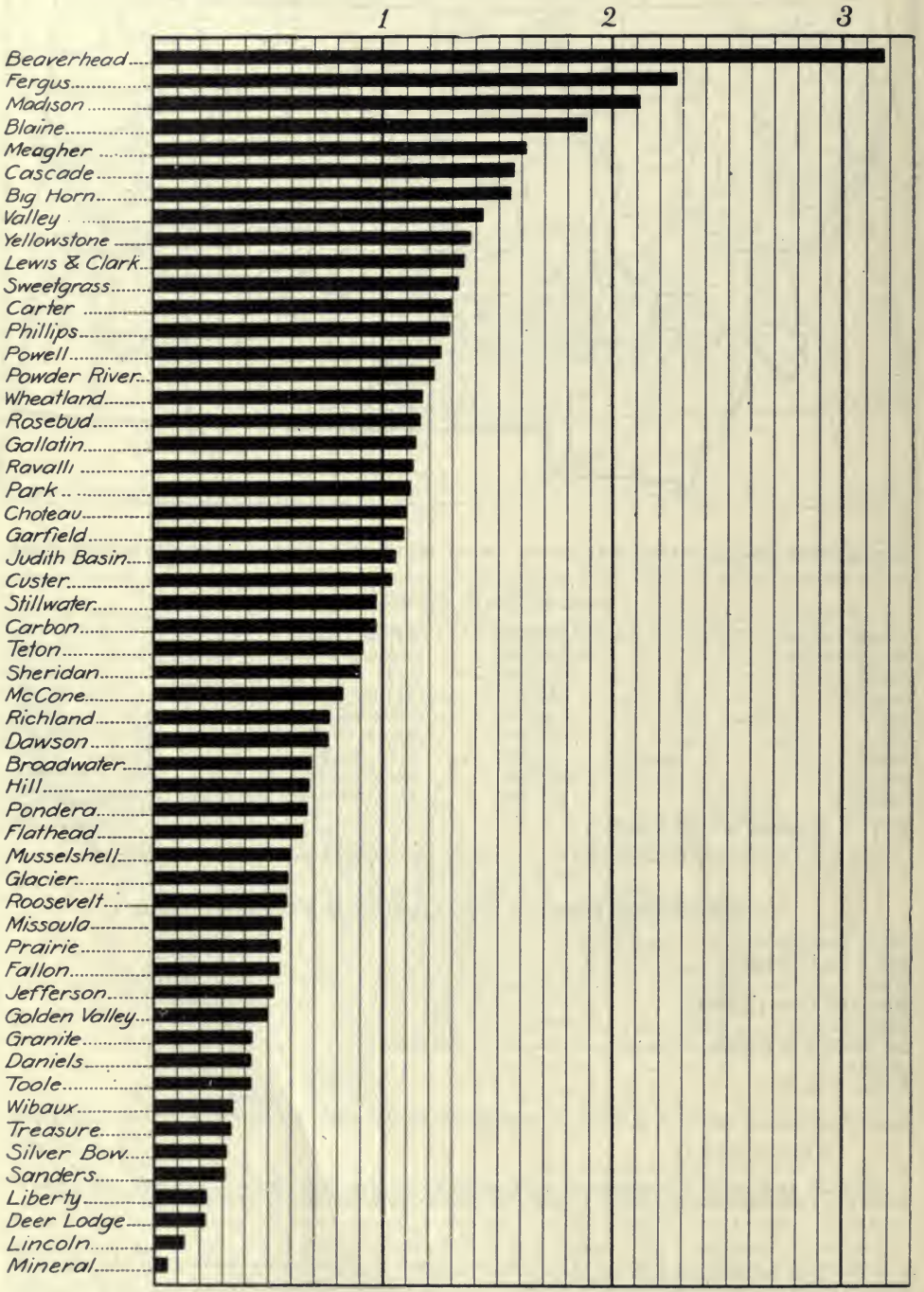
TOTAL INCOME FROM SALE OF LIVESTOCK AND THEIR PRODUCTS.....$ 49,766,000

GRAND TOTAL $100,167,000*

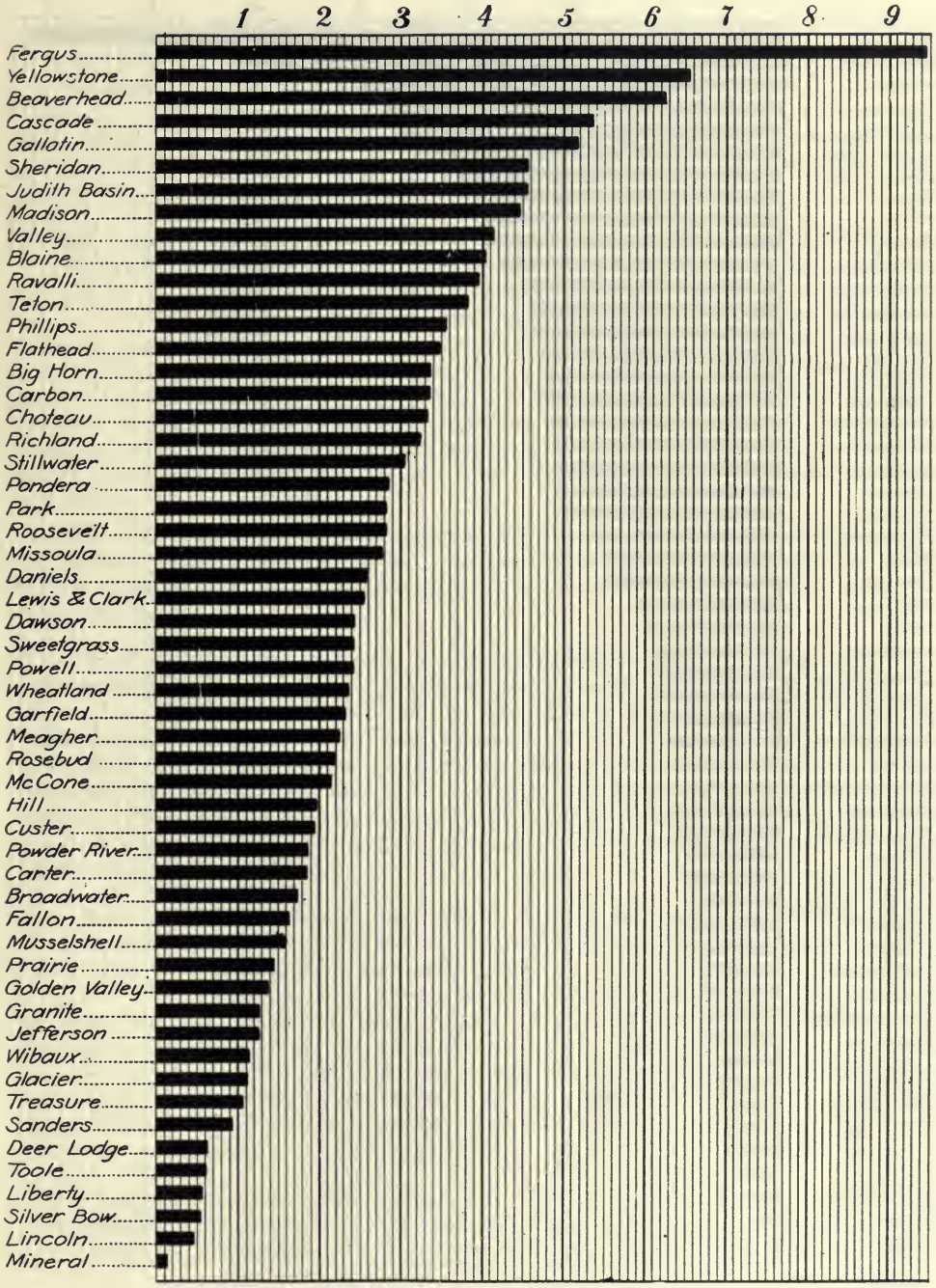
*There is a small percentage of duplication of income here, since it includes the value of some hay and other feeds sold by farmers to feed stock which are later sold by others.

MONTANA'S HAY CROP—Hay ranks second in importance among all the crops in the state, both of acreage and in value. Approximately 25 per cent of the total cropped area in 1923 was devoted to tame and wild hay combined. Practically all of the hay grown is used in the state; less than three per cent is usually shipped out.

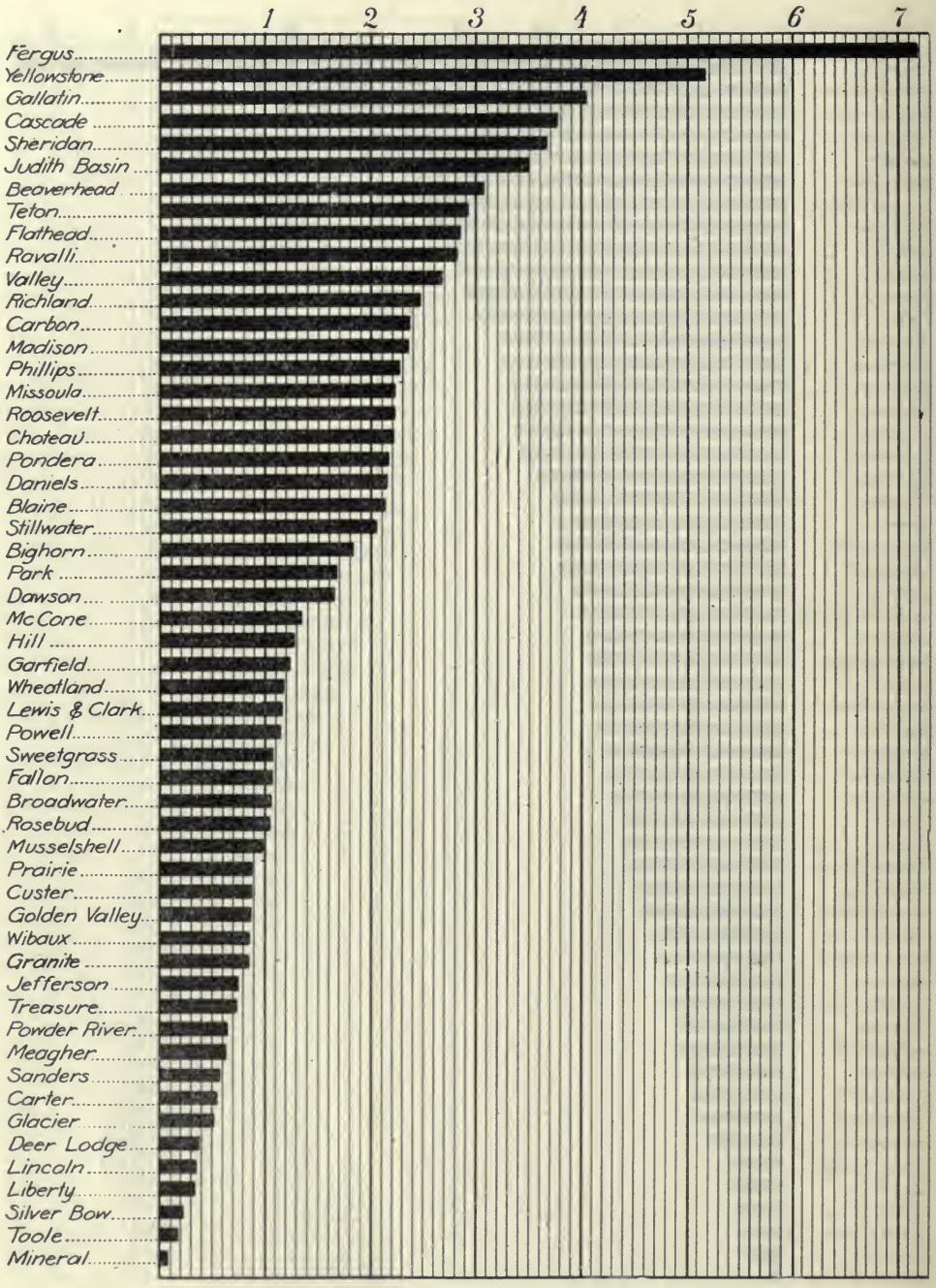
Estimated Receipts by Counties of All Livestock and Livestock Products Sold in 1923.
(In millions of dollars)



Estimated Combined Receipts from Livestock and Livestock Products Sold and Value of All Crops Produced in 1923—By Counties.
(In millions of dollars)



Estimated Total Farm Value of All Crops Produced in 1923—By Counties.
(In millions of dollars)



Montana Crops in 1923

Largest Total Crop Tonnage

The farmers of Montana in 1923 produced the largest total crop tonnage in the history of the state. This includes the second largest wheat crop ever raised, one of the largest hay crops, and by far the biggest harvest of corn, while the production of oats, barley, sugar beets, apples, beans, and a few other minor crops was above the average for recent years. This great tonnage was harvested in the face of not a few adverse factors which seriously operated against normal yields in parts of the state.

Net Farm Returns Low

Considering the state as a whole, the year 1923 may be regarded as a fairly successful one so far as yields and production alone are concerned. But from the standpoint of net returns to farmers it furnished great disappointment, mainly because of the low market value of wheat. One can realize how seriously this has affected our farmers, when it is recalled that more than 70 per cent of the cash crop income of Montana farmers normally comes from the sale of wheat. In addition to this, practically all other products of the farm had a very low purchasing power in terms of other commodities, including labor. It is noteworthy that low market values particularly applied both to wheat and to cattle, which are the two most important products of Montana's farms and ranges.

The total value of all crops produced in 1923 exceeded by about two and one-third million dollars that of the 1922 crops, the decreased value of wheat being more than offset by the increased total values of corn, oats, flax, sugar beets, barley, apples, beans and a few others.

More Diversification

General tendencies toward diversification and the attempts of farmers to find lines of profitable production were reflected in the shifts between crop acreages that took place in 1923. Wheat acreage was cut down to make room for more feed crops, such as corn, oats, barley and hay; while more flax, sugar beets and beans were grown as sources of cash income. In line with such changes in crops, farmers increased their holdings of milk cows, hogs and poultry. These changes indicate definitely that Montana farmers are growing into diversified farming steadily, and probably as rapidly as they should under prevailing conditions.

Total Cropped Area

The estimated total area in crops in 1923 was 6,848,000 acres, which is about 90,000 acres more than in 1922. The total acreage has more than held its own despite the fact that quite a number were forced to leave their farms after the 1922 crop season, due to the continued low prices for farm produce following several years of adversity. Several factors contributed toward maintaining the total area in crops. The average acreage of wheat and corn per farm was larger than ever before, more summer-fallow and corn ground were available for seeding in 1923 than in former years; corn took the place of much summer-fallow; there was more tame hay, mainly on non-irrigated lands; and there was some new land broken out, mostly for flax.

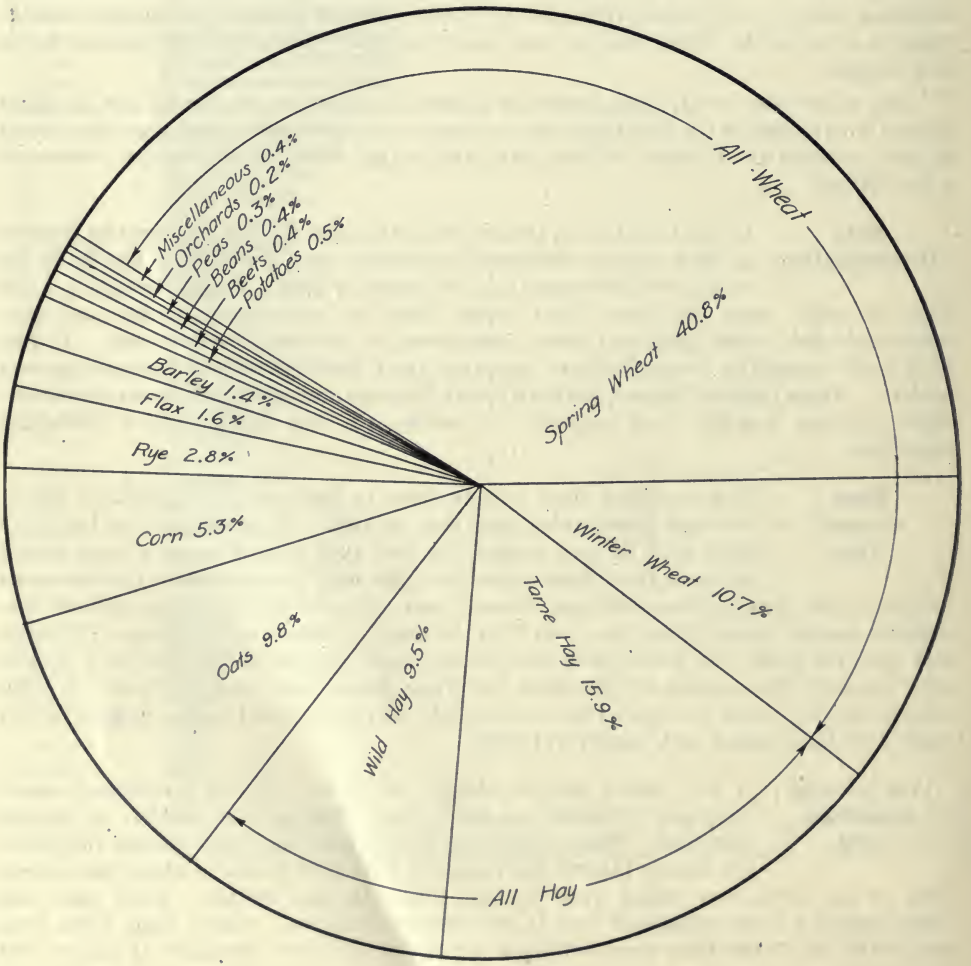
Crop Growing Conditions, 1923

A late spring delayed seeding of crops. Moisture conditions were generally favorable up until June, although not entirely so for all localities. Short periods of drouth and hot winds during the growing season injured the prospects for small grains in about the eastern fifth of the state, and caused poor average yields in that section. Black rust was responsible for some additional loss in the eastern counties. Heavy June rains over practically all of the state were extremely beneficial, but were excessive in places, and

caused local losses from floods. Later rains furnished quite generally adequate moisture for growing crops. Hail took a heavier toll of crops than usual. Grasshoppers presented a serious problem in localities in every district of the state. This pest did the greatest damage in the north central "Triangle," where they appeared early in the season and made almost a clean sweep over a considerable part of that section, after which most of them left. Poisoning campaigns in several counties were effective in saving crops from ruin. In all, the hoppers caused a heavy loss in both crops and in grass for stock, most of which was scattered in various parts of the state. Unusually heavy fall rains in the counties along the Yellowstone River and in those along the Wyoming line caused quite large losses in unthreshed small grains, hay, alfalfa seed, and other crops, and resulted in severe losses to the bean crop.

Crops were generally good in all districts in 1923, except in approximately the eastern fifth of the state, in part of the north central districts, where hoppers were bad, and in various scattered localities, due to conditions which prevailed only locally.

Relative Crop Acreages in Montana, 1923.



GENERAL SUMMARY MONTANA CROPS

Acreage, Production and Farm Value, 1923, 1922, 1921, 1920.

Crop	Year	Acres	Yield Per Acre	Production	Farm Value Dec. 1	
					Per Unit	Total
Winter Wheat	1923	738,000	17.0	12,546,000 Bus.	$ .82	$10,288,000
	1922	768,000	15.2	11,674,000 Bus.	.89	10,390,000
	1921	800,000*	14.0	11,200,000 Bus.	.85	9,520,000
	1920	780,000*	12.0	9,360,000 Bus.	1.28	11,981,000
Spring Wheat	1923	2,793,000	14.3	39,940,000 Bus.	.82	32,751,000
	1922	2,850,000	14.4	41,040,000 Bus.	.89	36,526,000
	1921	2,990,000*	12.0	35,880,000 Bus.	.85	30,498,000
	1920	3,100,000*	10.0	31,000,000 Bus.	1.28	39,680,000
Oats	1923	673,000	33.0	22,209,000 Bus.	.38	8,439,000
	1922	660,000	32.0	21,120,000 Bus.	.37	7,814,000
	1921	618,000	24.0	14,832,000 Bus.	.34	5,043,000
	1920	533,000	22.0	11,726,000 Bus.	.51	5,980,000
Barley	1923	97,000	25.5	2,474,000 Bus.	.48	1,188,000
	1922	92,000	25.0	2,300,000 Bus.	.50	1,150,000
	1921	75,000	20.5	1,538,000 Bus.	.60	923,000
	1920	64,000	18.0	1,152,000 Bus.	.65	749,000
Rye	1923	192,000	11.0	2,112,000 Bus.	.51	1,077,000
	1922	240,000	14.0	3,360,000 Bus.	.54	1,814,000
	1921	116,000	11.2	1,299,000 Bus.	.53	688,000
	1920	80,000*	8.0	640,000 Bus.	1.08	691,000
Flax	1923	110,000	8.2	902,000 Bus.	1.93	1,741,000
	1922	84,000	7.2	605,000 Bus.	1.97	1,192,000
	1921	110,000	5.0	550,000 Bus.	1.40	770,000
	1920	407,000	2.6	1,058,000 Bus.	1.75	1,851,000
Corn[1]	1923	365,000	26.0	9,490,000 Bus.	.65	6,168,000
	1922	228,000	24.3	5,540,000 Bus.	.53	2,936,000
	1921	190,000	20.0	3,800,000 Bus.	.67	2,546,000
	1920	184,000	12.1	2,226,000 Bus.	.80	1,789,000
Tame Hay	1923	1,087,000	1.88	2,044,000 Tons	8.90	18,192,000
	1922	1,045,000	1.89	1,975,000 Tons	9.00	17,775,000
	1921	1,045,000	1.80	1,881,000 Tons	8.70	16,365,000
	1920	1,105,000	1.80	1,989,000 Tons	12.00	23,868,000
Wild Hay	1923	653,000	.91	594,000 Tons	8.00	4,752,000
	1922	660,000	.90	594,000 Tons	8.00	4,752,000
	1921	657,000	.80	526,000 Tons	8.60	4,524,000
	1920	652,000	.95	619,000 Tons	9.00	5,571,000
Potatoes	1923	36,000	110.0	3,960,000 Bus.	.73	2,891,000
	1922	45,000	126.0	5,670,000 Bus.	.40	2,268,000
	1921	41,000	115.0	4,715,000 Bus.	.80	3,772,000
	1920	40,000	110.0	4,400,000 Bus.	1.05	4,620,000
Apples	1923	.....	.....	990,000 Bus.	1.30	1,287,000
	1922	.....	.....	610,000 Bus.	1.00	610,000
	1921	.....	.....	975,000 Bus.	1.50	1,465,000
	1920	.....	.....	825,000 Bus.	1.80	1,485,000
Beans[2]	1923	23,000	11.5	265,000 Bus.	3.40	901,000
	1922	3,800	13.0	49,000 Bus.	3.20	157,000
Alfalfa seed[3]	1923	6,400	2.5	16,000 Bus.	13.65	218,000
	1922	7,200	2.8	20,000 Bus.	11.00	220,000
Seed Peas[3]	1923	18,600	13.6	253,000 Bus.	1.58	400,000

*Tentative Revisions.

[1] Corn production based upon total acreage, but not all harvested for grain, and figure should be used accordingly.

[2] Yield and production include marketable beans only.

[3] Data incomplete for previous years.

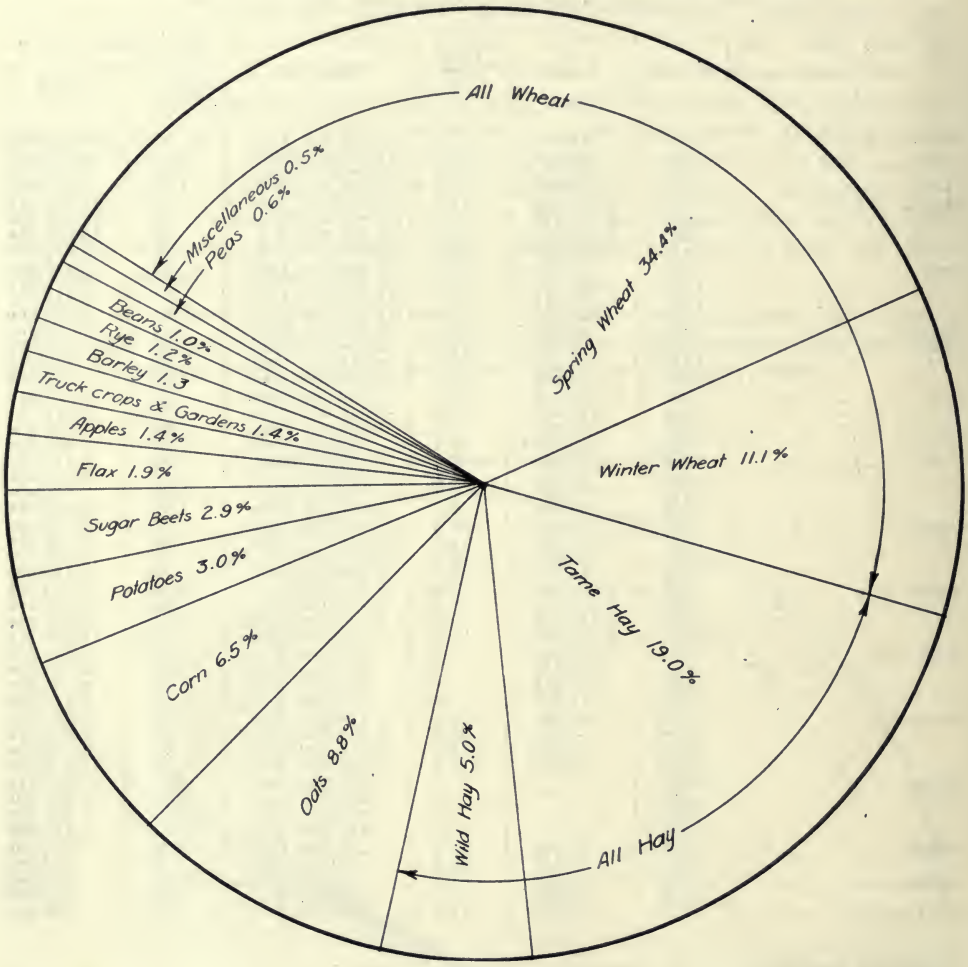
VALUE FIRST ELEVEN CROPS ABOVE.	TOTAL ESTIMATED VALUE ALL CROPS.
1923 $ 88,774,000	$ 95,917,000
1922 87,227,000	93,580,000
1921 76,114,000	81,430,000
1920 98,265,000	105,700,000

ESTIMATED PERCENTAGES SOLD OF MONTANA MAIN CROPS, 1923

Crop	Per Cent Sold	Crop	Per Cent Sold
Wheat	82	Corn	7
Oats	17	Hay	18
Barley	13	Potatoes	40
Rye	18	Apples	45
Flax	85	All crops combined	53*

*Based upon total crop values, and not tonnage.

Relative Importance of Montana Crops in 1923 According to Gross Farm Values.

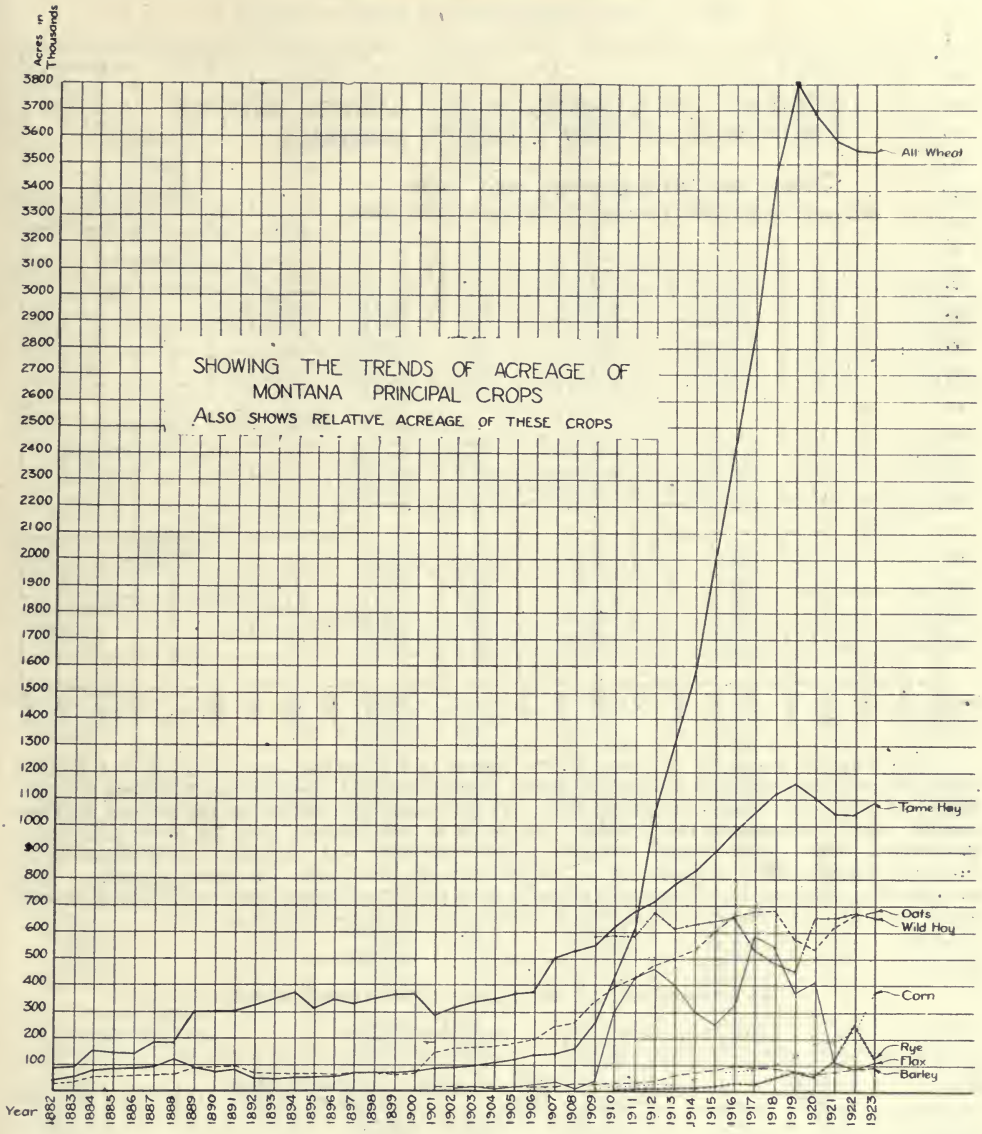


MONTANA'S RANK WITH OTHER STATES

Crop	Rank in Production 1923	Crop	Rank in Production 1923
Spring Wheat	2	Potatoes	27
Winter Wheat	16	Apples (Commercial)	27
All Wheat	5	Corn	31
Oats	17	Hay, Tame	18
Barley	17	Hay, Wild	6
Flax	4	Beans	7

Montana ranked 22d with other states in the total acres in crop in 1923, and 30th in the total value of crops produced. The area cropped in Montana exceeds that of the ten other far western states except California, which leads by only a few thousand acres. Of this western group of states, California, Colorado, and Washington lead Montana in total crop values.

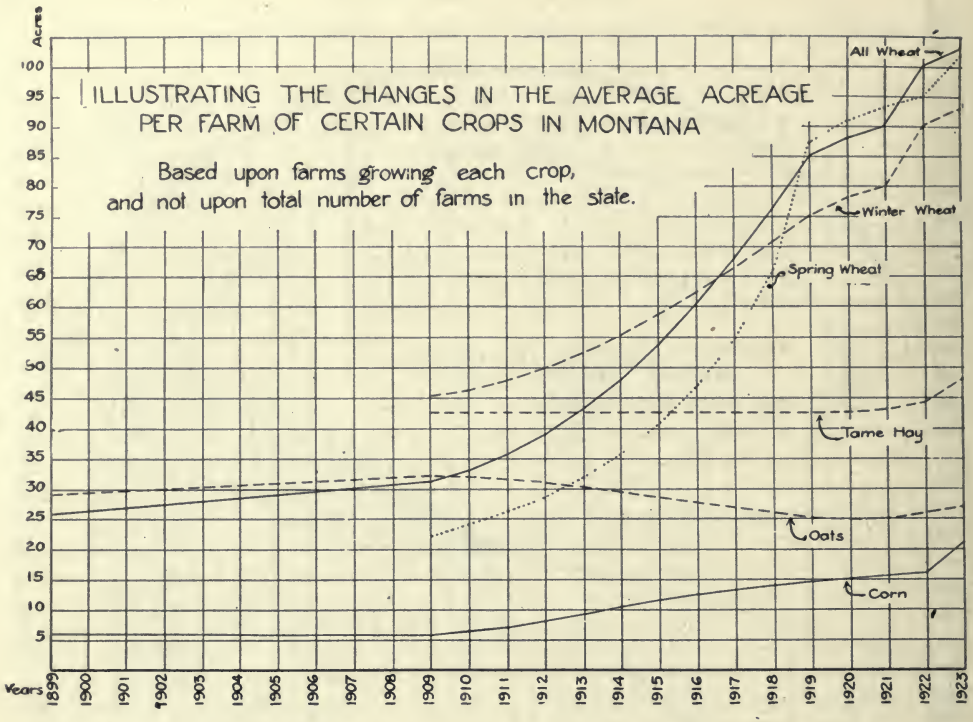
In the total value of all livestock on farms and ranges, Montana ranks 17th among the other states, and stands second to California among the eleven western states.



AVERAGE ASSESSED VALUATION OF MONTANA LANDS.

	Irrigated Lands	Non-Irrigated Agricultural Lands	Grazing Lands
1923	$51.08	$12.76	$6.24
1922	51.38	12.65	6.51

MONTANA'S TIMBER RESOURCES—The estimated timber stand in the state is 59,509 million feet. Approximately two-thirds of this is under the jurisdiction of the federal government, about four per cent is owned by the state, and about twenty-nine per cent is privately owned.


ILLUSTRATING THE CHANGES IN THE AVERAGE ACREAGE PER FARM OF CERTAIN CROPS IN MONTANA
Based upon farms growing each crop, and not upon total number of farms in the state.
Acres
Years
All Wheat
Winter Wheat
Spring Wheat
Tame Hay
Oats
Corn

This graph is presented to illustrate the trends in the average size of fields of the main crops, but is not an absolute measure of them. Bureau of the Census figures were used for 1899. 1909, and with some modifications for 1919. As no data are available for the periods between census years, it is assumed that changes were more or less gradual. For the past three years, the annual farm census returns through county assessors and surveys of individual farms covering representative portions of all farms, furnish the bases for state averages. The averages for tame hay for the past three years were partly estimated, since our form of returns do not permit of accurate computation of average per farm for this crop.

AVERAGE VALUE OF PLOW LANDS PER ACRE.

March	Poor Plow Land			Good Plow Land			All Plow Land		
	Montana	Iowa	United States	Montana	Iowa	United States	Montana	Iowa	United States
1924	$13	$107	$43	$30	$169	$82–	$21	$143	$64+
1923	14	115	45	31	181	85	22	153	67
1919	21	129	51	45	196	92	34	169	74

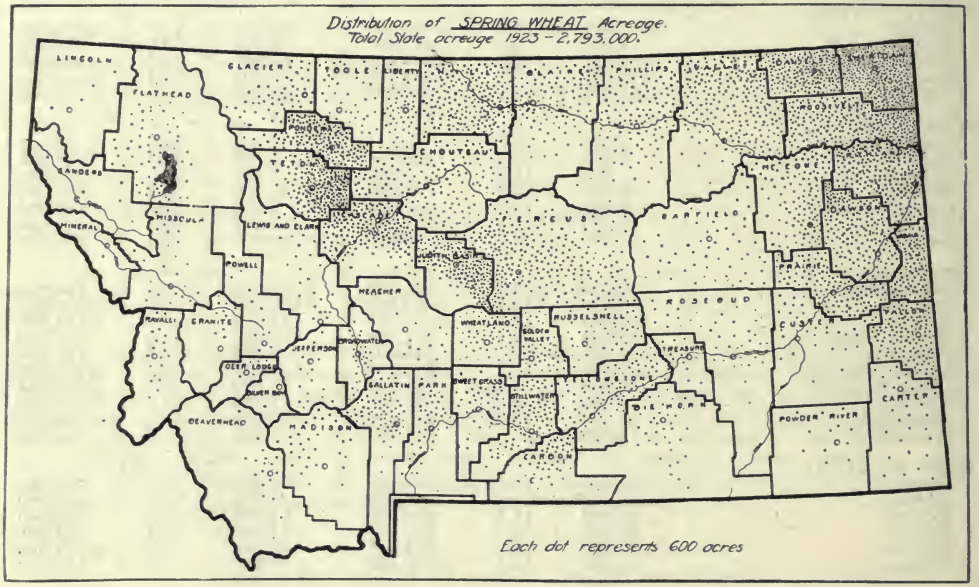
FLOUR MILLING IN MONTANA—This is one of the most important state industries from the standpoint of agriculture. The Montana Trade Commission reports for the fiscal year ending June 30, 1923, that there were 66 flour mills in operation in the state, having an aggregate rated capacity of 12,053 barrels of flour per day. These mills ground 8,692,825 bushels of wheat in that year, or about 16.5 per cent of the 1922 wheat crop of the state.

SPRING WHEAT BY COUNTIES—1922 and 1923.

District and County	1922 Acreage	1922 Acre Yield (bu.)	1922 Production (bu.)	1923 Acreage	1923 Acre Yield (bu.)	1923 Production (bu.)
NORTHWESTERN						
Flathead	50,000	10.6	530,000	47,000	21.1	990,000
Lincoln	3,000	5.7	17,000	2,500	20.0	50,000
NORTH CENTRAL						
Blaine	71,000	12.4	855,000	69,000	17.0	1,173,000
Chouteau	99,000	7.2	718,000	88,000	10.2	900,000
Glacier	29,000	13.8	400,000	31,000	13.6	420,000
Hill	152,000	9.8	1,490,000	130,000	7.7	995,000
Liberty	43,000	8.9	382,000	34,000	8.8	300,000
Pondera	102,000	15.7	1,600,000	98,000	19.2	1,880,000
Teton	112,000	13.0	1,456,000	115,000	22.5	2,595,000
Toole	27,000	8.0	216,000	22,000	6.0	132,000
NORTHEASTERN						
Daniels	117,000	18.8	2,200,000	112,000	14.5	1,630,000
Phillips	78,000	12.6	982,000	73,000	12.0	876,000
Roosevelt	155,000	17.3	2,680,000	150,000	10.0	1,500,000
Sheridan	243,000	16.9	4,107,000	235,000	10.2	2,397,000
Valley	154,000	15.1	2,325,000	147,000	11.8	1,730,000
WEST CENTRAL						
Deer Lodge	3,000	26.7	80,000	3,000	25.0	75,000
Granite	6,000	23.3	140,000	5,500	21.8	120,000
Mineral	400	15.0	6,000	400	25.0	10,000
Missoula	18,000	10.0	180,000	15,000	24.7	370,000
Powell	8,000	20.0	160,000	7,000	20.0	140,000
Ravalli	11,000	27.3	300,000	11,000	27.4	301,000
Sanders	2,200	13.7	30,000	2,400	22.5	54,000
CENTRAL						
Broadwater	17,000	17.9	305,000	16,000	22.2	355,000
Cascade	90,000	16.1	1,444,000	101,000	22.9	2,314,000
Fergus	176,000	13.7	2,416,000	164,000	19.5	3,198,000
Golden Valley	32,000	8.8	281,000	29,000	11.6	337,000
Jefferson	9,000	19.0	171,000	8,500	19.0	161,000
Judith Basin	110,000	11.3	1,232,000	100,000	22.3	2,230,000
Lewis & Clark	14,000	16.5	231,000	15,000	20.7	310,000
Meagher	8,000	12.0	96,000	8,000	17.0	136,000
Musselshell	21,000	10.1	212,000	25,000	16.2	406,000
Wheatland	34,000	13.0	442,000	36,000	22.2	800,000
EAST CENTRAL						
Dawson	104,000	13.5	1,404,000	110,000	8.8	978,000
Garfield	28,000	14.3	400,000	30,000	13.8	445,000
McCone	63,000	15.4	970,000	64,000	10.1	648,000
Prairie	64,000	13.4	857,000	68,000	7.8	530,000
Richland	130,000	15.2	1,976,000	126,000	8.0	1,008,000
Wibaux	62,000	14.3	887,000	63,000	7.9	498,000
SOUTHWESTERN						
Beaverhead	10,000	18.6	186,000	10,000	23.0	230,000
Madison	20,000	24.5	490,000	18,000	26.2	472,000
Silver Bow	400	20.0	8,000	400	20.0	8,000
SOUTH CENTRAL						
Carbon	31,000	23.1	716,000	28,000	20.9	586,000
Gallatin	42,000	20.6	865,000	42,000	23.5	987,000
Park	24,000	20.7	497,000	25,000	25.3	633,000
Stillwater	41,000	12.0	492,000	50,000	15.0	750,000
Sweet Grass	22,000	16.4	360,000	22,000	19.8	435,000
Yellowstone	55,000	15.3	838,000	59,000	18.0	1,062,000
SOUTHEASTERN						
Big Horn	18,000	16.0	288,000	23,000	17.0	391,000
Carter	15,000	14.5	217,000	17,000	9.5	161,000
Custer	17,000	15.1	257,000	20,000	10.0	200,000
Fallon	72,000	15.0	1,080,000	78,000	7.5	585,000
Powder River	8,000	13.6	109,000	8,000	14.0	112,000
Rosebud	23,000	15.7	361,000	25,000	10.4	260,000
Treasure	6,000	16.3	98,000	6,300	12.0	76,000
STATE TOTAL	2,850,000	14.4	41,040,000	2,793,000	14.3	39,940,000

SPRING WHEAT.

Moisture conditions were quite favorable for the start of the 1923 spring wheat crop, but more than the usual proportion was sown late, because of lack of labor and a backward spring. Average yields per acre were reduced about fifty per cent in the eastern counties by several temporary hot dry periods, and by black rust. Grasshoppers devastated a considerable acreage in the north central district, and reduced the average yields greatly there. In all other sections the yields were generally better than any year since 1916, and brought the average for the state up to within a tenth of a bushel of the average for 1922. The quality of the spring wheat was not as good as usual, due to light chaffy grain in the eastern sections, and to some injury from rains after harvest, especially in the central and southern portions. Prices for the crop were very disappointing, and farmers produced wheat at a loss except where yields were unusually good.

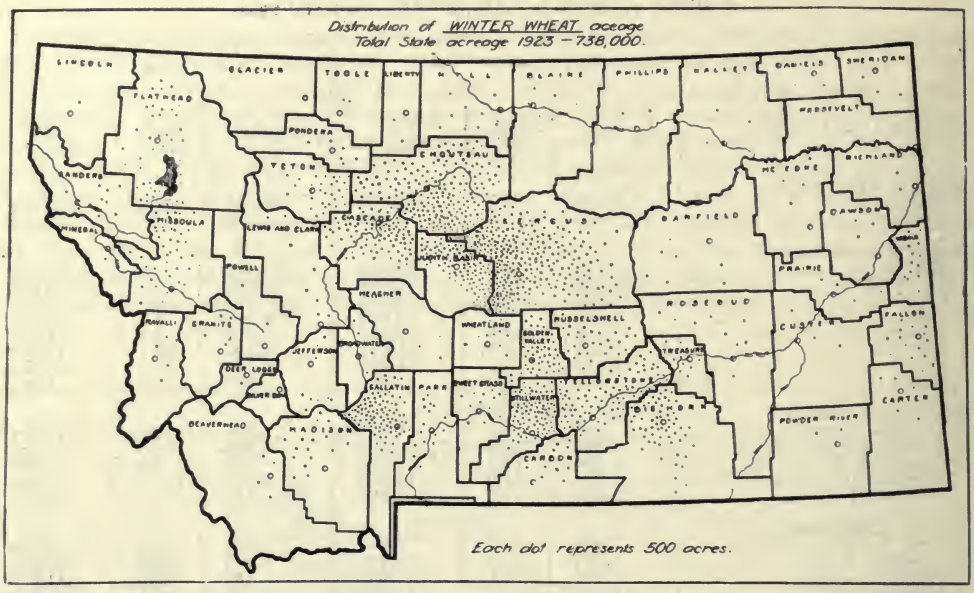


WINTER WHEAT.

Winter wheat for 1923 was seeded under unfavorable conditions, and the young plants made a very poor start before winter set in. Abandonment was unusually heavy in the following spring, but that remaining for harvest yielded much better than was expected earlier in the season, the average yield per acre for 1923 being the best since 1916. As very little winter wheat is grown in the eastern counties, the average yield was not adversely influenced as was that of spring wheat. In the fall of 1923 a big reduction in the acreage sown to winter wheat took place in the central and north central counties, partly on account of farmers being occupied by delayed harvesting and threshing, and partly by the intention to replace it by spring wheat. This reduction was partially offset by increased seedings in the eastern fourth of the state and in the northwestern part.

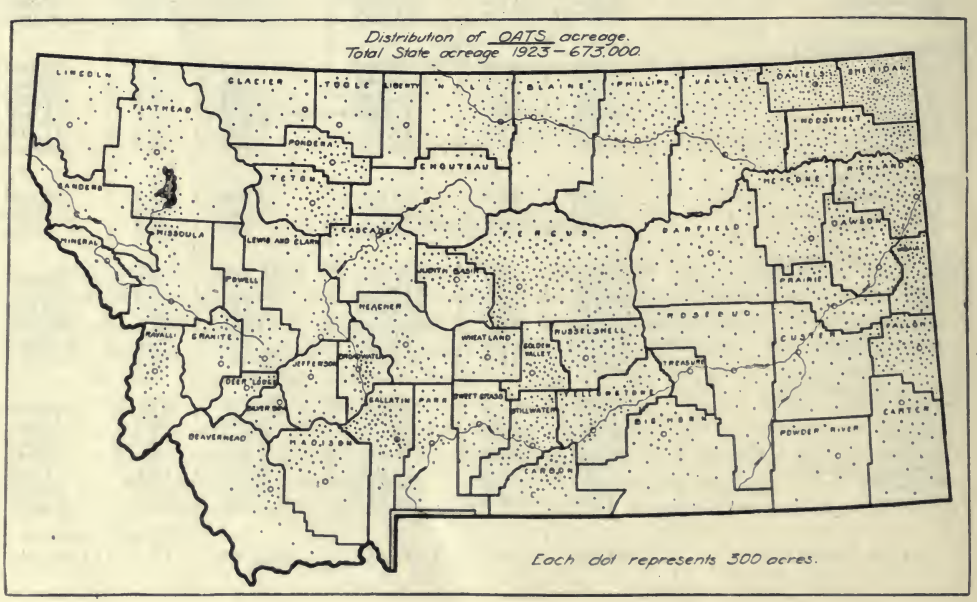
WINTER WHEAT BY COUNTIES—1922 and 1923

District and County	1922 Acreage	1922 Acre Yield (bu.)	1922 Production (bu.)	1923 Acreage	1923 Acre Yield (bu.)	1923 Production (bu.)
NORTHWESTERN						
Flathead	22,000	16.4	360,000	30,000	27.0	810,000
Lincoln	400	15.0	6,000	500	26.0	13,000
NORTH CENTRAL						
Blaine	6,000	13.3	80,000	4,000	8.0	32,000
Chouteau	106,000	10.2	1,081,000	97,000	11.1	1,078,000
Glacier	200	10.0	2,000	200	10.0	2,000
Hill	9,000	10.8	97,000	5,000	8.0	40,000
Liberty	1,000	10.0	10,000	1,000	8.0	8,000
Pondera	3,000	17.0	51,000	3,000	13.3	40,000
Teton	12,000	13.0	156,000	16,000	16.0	256,000
Toole	500	10.0	5,000	500	8.0	4,000
NORTHEASTERN						
Daniels	600	13.3	8,000	1,000	12.0	12,000
Phillips	1,000	13.0	13,000	1,000	12.0	12,000
Roosevelt	500	14.0	7,000	800	8.8	7,000
Sheridan	1,000	14.0	14,000	2,000	12.0	24,000
Valley	1,000	14.0	14,000	1,600	11.2	18,000
WEST CENTRAL						
Deer Lodge	400	12.5	5,000	300	23.3	7,000
Granite	2,000	15.0	30,000	2,000	20.0	40,000
Mineral	400	12.5	5,000	500	22.0	11,000
Missoula	18,000	11.7	210,000	22,000	26.6	585,000
Powell	3,000	14.7	44,000	1,000	17.0	17,000
Ravalli	2,000	17.0	34,000	2,000	28.5	57,000
Sanders	5,000	15.0	75,000	5,000	27.0	135,000
CENTRAL						
Broadwater	5,000	19.4	97,000	2,500	18.0	45,000
Cascade	43,000	17.9	770,000	43,000	23.0	989,000
Fergus	156,000	17.9	2,800,000	151,000	16.6	2,507,000
Golden Valley	30,000	10.2	306,000	22,000	12.0	264,000
Jefferson	5,000	17.0	85,000	6,000	18.0	108,000
Judith Basin	60,000	17.4	1,041,000	64,000	17.0	1,091,000
Lewis & Clark	4,000	16.0	64,000	4,000	15.7	63,000
Meagher	3,000	17.0	51,000	2,000	17.0	34,000
Musselshell	21,000	14.3	300,000	15,000	16.5	247,000
Wheatland	7,000	14.0	98,000	5,000	17.0	85,000
EAST CENTRAL						
Dawson	500	12.0	6,000	1,500	8.0	12,000
Garfield	2,000	13.5	27,000	4,500	11.5	52,000
McCone	1,400	14.3	20,000	2,000	8.5	17,000
Prairie	1,000	15.0	15,000	2,500	7.2	18,000
Richland	700	14.3	10,000	1,200	9.2	11,000
Wibaux	4,000	15.0	60,000	7,000	7.1	50,000
SOUTHWESTERN						
Beaverhead	1,500	16.0	24,000	2,000	25.0	50,000
Madison	5,000	21.0	105,000	8,000	26.8	213,000
Silver Bow	200	15.0	3,000	200	25.0	5,000
SOUTH CENTRAL						
Carbon	14,000	14.0	196,000	5,000	16.6	83,000
Gallatin	44,000	21.9	940,000	46,000	26.8	1,232,000
Park	7,000	18.3	128,000	8,000	25.0	20,000
Stillwater	53,000	11.9	630,000	44,000	15.0	660,000
Sweet Grass	10,000	16.0	160,000	7,000	19.0	133,000
Yellowstone	46,000	14.8	680,000	40,000	16.5	662,000
SOUTHEASTERN						
Big Horn	29,000	15.4	448,000	27,000	17.4	470,000
Carter	1,500	14.0	21,000	2,300	11.2	26,000
Custer	1,200	15.0	18,000	1,500	8.0	12,000
Fallon	5,000	16.0	80,000	7,000	7.1	50,000
Powder River	1,000	16.0	16,000	1,000	14.0	14,000
Rosebud	7,000	14.7	103,000	4,400	9.3	41,000
Treasure	4,000	16.0	64,000	5,000	14.8	74,000
STATE TOTAL	768,000	15.2	11,673,000	738,000	17.0	12,546,000



OATS.

More oats were sown in 1923, mostly to produce more local feed. The crop was generally good, except in the east and north central portions where dry weather and hoppers seriously reduced the yields. The yield per acre was the best since 1916.



OATS BY COUNTIES—1922-1923.

District and County	1922 Acreage	1922 Acre Yield (bu.)	1922 Production (bu.)	1923 Acreage	1923 Acre Yield (bu.)	1923 Production (bu.)
NORTHWESTERN						
Flathead	18,000	22.2	400,000	18,000	42.2	764,000
Lincoln	4,000	12.5	50,000	4,000	43.0	172,000
NORTH CENTRAL						
Blaine	17,000	26.4	448,000	15,000	34.5	518,000
Chouteau	15,000	22.3	334,000	12,000	29.6	356,000
Glacier	4,000	33.3	133,000	4,500	27.5	124,000
Hill	23,000	22.5	518,000	17,000	21.3	362,000
Liberty	3,000	21.6	65,000	2,300	27.0	62,000
Pondera	10,000	35.5	355,000	10,000	33.5	335,000
Teton	11,000	24.8	273,000	13,000	33.4	436,000
Toole	4,000	22.0	88,000	3,000	22.0	66,000
NORTHEASTERN						
Daniels	26,000	30.1	783,000	28,000	33.4	935,000
Phillips	21,000	25.8	542,000	21,000	33.8	710,000
Roosevelt	26,000	36.2	941,000	25,000	27.4	684,000
Sheridan	48,000	36.0	1,728,000	47,000	27.1	1,275,000
Valley	33,000	28.0	924,000	32,000	28.1	897,000
WEST CENTRAL						
Deer Lodge	2,000	55.0	110,000	2,500	51.2	128,000
Granite	3,300	55.8	184,000	3,400	46.2	157,000
Mineral	400	52.5	21,000	400	45.0	18,000
Missoula	9,000	37.6	338,000	9,000	50.0	450,000
Powell	7,000	45.6	319,000	7,000	38.0	266,000
Ravalli	7,500	55.5	416,000	10,000	61.0	610,000
Sanders	2,000	35.0	70,000	2,200	45.4	100,000
CENTRAL						
Broadwater	9,000	35.0	315,000	9,800	46.4	455,000
Cascade	12,000	32.7	392,000	13,000	37.1	482,000
Fergus	48,000	25.2	1,210,000	52,000	38.1	1,984,000
Golden Valley	13,000	18.2	237,000	12,000	23.8	286,000
Jefferson	3,500	40.0	140,000	3,200	48.1	154,000
Judith Basin	13,000	28.0	364,000	12,000	41.7	500,000
Lewis & Clark	5,500	37.0	203,000	6,300	33.3	210,000
Meagher	4,200	33.3	140,000	5,200	35.6	185,000
Musselshall	11,000	26.0	286,000	12,000	29.0	348,000
Wheatland	6,600	31.1	205,000	6,600	35.3	233,000
EAST CENTRAL						
Dawson	21,000	31.8	668,000	21,000	24.6	516,000
Garfield	14,000	27.7	388,000	15,000	31.0	465,000
McCone	16,000	30.0	480,000	17,000	24.0	408,000
Prairie	9,000	31.6	284,000	10,000	21.0	210,000
Richland	25,000	38.6	965,000	26,000	23.2	604,000
Wibaux	14,500	32.9	477,000	15,500	25.2	390,000
SOUTHWESTERN						
Beaverhead	8,000	37.1	297,000	9,000	47.2	425,000
Madison	9,000	42.0	378,000	9,700	49.2	477,000
Silver Bow	800	29.0	23,000	800	32.5	26,000
SOUTH CENTRAL						
Carbon	7,700	26.7	206,000	7,000	51.4	360,000
Gallatin	17,000	51.4	875,000	19,000	50.0	950,000
Park	8,000	49.6	397,000	9,000	48.7	438,000
Stillwater	15,500	26.4	409,000	16,000	27.5	440,000
Sweet Grass	6,400	36.6	234,000	6,800	37.2	253,000
Yellowstone	16,500	35.5	582,000	16,600	34.0	564,000
SOUTHEASTERN						
Big Horn	7,000	36.0	252,000	8,300	33.0	266,000
Carter	8,000	41.0	328,000	7,600	29.2	222,000
Custer	8,600	33.4	287,000	9,400	21.0	197,000
Fallon	17,000	38.0	646,000	19,500	21.0	410,000
Powder River	2,000	36.0	72,000	2,400	29.2	70,000
Rosebud	7,000	37.4	262,000	7,000	26.3	184,000
Treasure	2,000	39.0	78,000	2,000	36.0	72,000
STATE TOTAL	660,000	32.0	21,120,000	673,000	33.0	22,209,000

BARLEY.

With the intention of raising more feed, the farmers planted more barley in 1923, and the average yield and total production was the largest since 1916.

BARLEY BY COUNTIES—1922-1923.

District and County	1922 Acreage	1922 Acre Yield (bu)	1922 Production (bu.)	1923 Acreage	1923 Acre Yield (bu.)	1923 Production (bu.)
NORTHWESTERN						
Flathead	13,000	18.0	234,000	14,000	35.3	494,000
Lincoln	500	14.0	7,000	500	26.0	13,000
NORTH CENTRAL						
Blaine	1,800	19.5	35,000	1,600	21.9	35,000
Chouteau	800	15.0	12,000	600	16.7	10,000
Glacier	300	26.7	8,000	400	25.0	10,000
Hill	2,200	15.4	34,000	1,800	13.3	24,000
Liberty	300	20.0	6,000	300	13.3	4,000
Pondera	3,600	19.5	70,000	4,200	29.0	122,000
Teton	1,500	20.0	30,000	2,000	26.0	52,000
Toole	200	20.0	4,000	200	15.0	3,000
NORTHEASTERN						
Daniels	800	25.0	20,000	600	20.0	12,000
Phillips	700	22.9	16,000	600	21.7	13,000
Roosevelt	1,400	25.7	36,000	1,300	16.5	21,000
Sheridan	2,600	26.0	70,000	2,900	20.0	58,000
Valley	1,600	23.1	37,000	1,700	20.6	35,000
WEST CENTRAL						
Deer Lodge	200	25.0	5,000	200	30.0	6,000
Granite	500	30.0	15,000	500	28.0	14,000
Mineral	100	20.0	2,000	100	30.0	3,000
Missoula	1,800	18.8	34,000	1,900	31.5	60,000
Powell	400	20.0	8,000	400	27.5	11,000
Ravalli	1,600	36.3	58,000	1,600	33.8	54,000
Sanders	300	23.3	7,000	400	30.0	12,000
CENTRAL						
Broadwater	1,400	33.0	46,000	1,200	26.7	32,000
Cascade	2,800	26.1	73,000	3,000	28.7	86,000
Fergus	7,000	22.0	154,000	7,500	28.0	210,000
Golden Valley	800	18.7	15,000	800	21.2	17,000
Jefferson	400	35.0	14,000	400	27.5	11,000
Judith Basin	3,700	23.8	88,000	3,800	28.5	107,000
Lewis & Clark	700	22.9	16,000	800	25.0	20,000
Meagher	800	27.5	22,000	800	20.0	16,000
Musselshell	600	23.3	14,000	700	22.9	16,000
Wheatland	800	25.0	20,000	900	22.2	20,000
EAST CENTRAL						
Dawson	1,600	23.2	37,000	1,700	13.5	23,000
Garfield	800	22.5	18,000	900	16.7	15,000
McCone	700	22.4	16,000	800	16.2	13,000
Prairie	1,100	25.0	27,000	1,100	14.5	16,000
Richland	2,300	25.6	59,000	2,500	15.2	38,000
Wibaux	900	26.7	24,000	1,000	13.0	13,000
SOUTHWESTERN						
Beaverhead	2,200	29.0	64,000	2,200	29.6	65,000
Madison	1,700	29.3	50,000	1,800	30.0	54,000
Silver Bow	100	25.0	2,000	100	30.0	3,000
SOUTH CENTRAL						
Carbon	1,200	40.0	48,000	1,500	32.0	48,000
Gallatin	5,000	37.4	187,000	5,000	32.0	160,000
Park	5,200	35.7	186,000	5,500	29.0	159,000
Stillwater	1,400	22.2	31,000	1,600	20.0	32,000
Sweet Grass	1,100	24.5	27,000	1,100	23.6	26,000
Yellowstone	2,400	25.8	62,000	2,500	23.2	58,000
SOUTHEASTERN						
Big Horn	2,000	29.0	58,000	2,200	16.4	36,000
Carter	1,000	29.0	29,000	1,100	15.5	17,000
Custer	700	23.0	16,000	800	16.3	13,000
Fallon	3,700	29.6	110,000	4,000	13.0	52,000
Powder River	700	23.0	16,000	800	16.3	13,000
Rosebud	600	21.6	13,000	600	15.0	9,000
Treasure	400	25.0	10,000	500	20.0	10,000
STATE TOTAL	92,000	25.0	2,300,000	97,000	25.5	2,474,000

RYE.

Rye was a disappointing crop in 1923. The acreage sown in the fall of 1922 was much smaller than the previous year, and the crop made a very poor start. Stands were very spotted in the main rye counties of the north, and average yields obtained were low. Unsatisfactory market prices for this crop during the last three years have caused it to be largely dropped as a cash crop. Corn is replacing some rye acreage.

RYE BY COUNTIES—1922 and 1923.

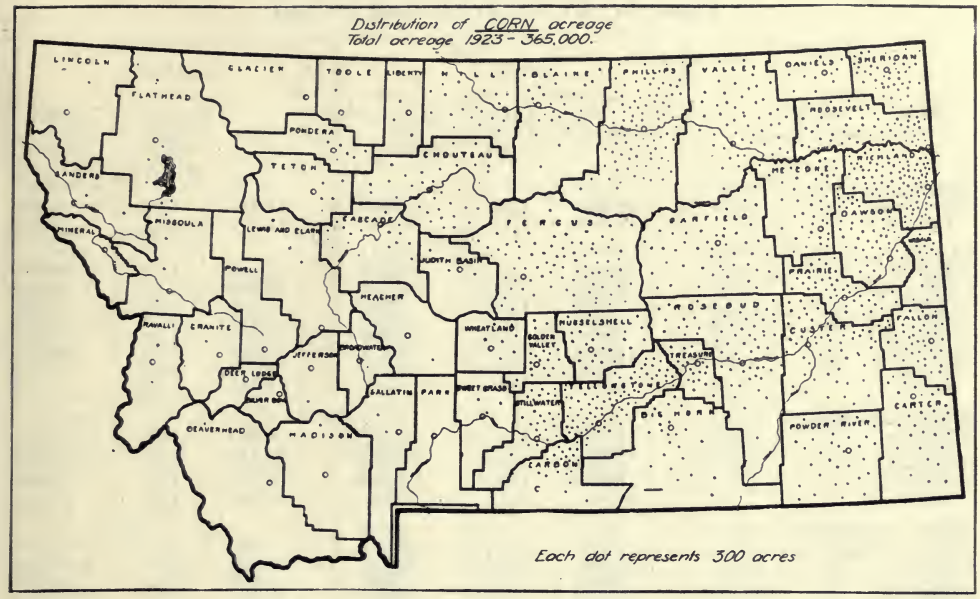
District and County	1922			1923		
	Acreage	Acre Yield (bu.)	Production (bu.)	Acreage	Acre Yield (bu.)	Production (bu.)
NORTHWESTERN						
Flathead	3,400	16.0	54,000	3,200	23.7	76,000
Lincoln	600	13.3	8,000	600	21.7	13,000
NORTH CENTRAL						
Blaine	55,000	13.2	726,000	42,000	8.0	336,000
Chouteau	14,000	10.0	140,000	10,000	11.7	117,000
Glacier	2,000	17.0	34,000	2,000	9.0	18,000
Hill	20,000	11.0	220,000	16,000	6.0	96,000
Liberty	2,400	10.9	26,000	1,400	5.7	8,000
Pondera	1,600	20.0	32,000	1,400	13.6	19,000
Teton	3,500	18.0	63,000	4,000	14.5	58,000
Toole	2,000	10.0	20,000	1,500	8.0	12,000
NORTHEASTERN						
Daniels	5,300	17.0	90,000	5,000	10.0	50,000
Phillips	13,000	13.0	169,000	10,000	9.0	90,000
Roosevelt	16,000	15.0	240,000	15,000	9.7	146,000
Sheridan	14,000	15.0	210,000	13,000	9.7	126,000
Valley	4,400	14.5	64,000	3,600	10.6	38,000
WEST CENTRAL						
Deer Lodge	200	12.0	2,000	200	20.0	4,000
Granite	500	12.0	6,000	400	20.0	8,000
Mineral	100	12.0	1,000	100	20.0	2,000
Missoula	1,300	12.3	16,000	1,200	23.3	28,000
Powell	500	14.0	7,000	500	18.0	9,000
Ravalli	800	15.0	12,000	700	21.4	15,000
Sanders	1,600	11.9	19,000	1,200	20.0	24,000
CENTRAL						
Broadwater	900	14.4	13,000	800	12.5	10,000
Cascade	2,000	15.0	30,000	1,500	16.7	25,000
Fergus	14,000	15.0	210,000	11,000	14.0	154,000
Golden Valley	2,500	10.0	25,000	1,200	12.5	15,000
Jefferson	3,500	17.4	61,000	2,000	18.0	36,000
Judith Basin	1,400	16.2	23,000	600	16.7	10,000
Lewis & Clark	1,100	15.5	17,000	1,000	21.0	21,000
Meagher	1,000	16.0	16,000	1,000	16.0	16,000
Musselshell	2,500	11.2	28,000	1,600	17.5	28,000
Wheatland	700	15.7	11,000	600	16.7	10,000
EAST CENTRAL						
Dawson	1,200	15.8	19,000	1,600	10.6	17,000
Garfield	6,000	15.0	90,000	4,000	10.2	41,000
McCone	3,000	15.0	45,000	2,500	11.2	28,000
Prairie	1,800	15.5	28,000	1,200	11.7	14,000
Richland	2,700	14.0	38,000	2,500	10.4	26,000
Wibaux	1,700	14.1	25,000	1,000	9.0	9,000
SOUTHWESTERN						
Beaverhead	500	18.0	9,000	600	21.7	13,000
Madison	600	18.2	11,000	700	24.3	17,000
Silver Bow	1,400	15.0	21,000	800	17.7	15,000
SOUTH CENTRAL						
Carbon	1,500	11.3	17,000	600	18.3	11,000
Gallatin	3,000	20.7	62,000	4,000	18.5	74,000
Park	800	17.5	14,000	600	18.3	11,000
Stillwater	2,600	15.0	39,000	2,000	14.0	28,000
Sweet Grass	800	12.5	10,000	600	23.3	14,000
Yellowstone	3,500	17.1	60,000	1,800	16.6	30,000
SOUTHEASTERN						
Big Horn	1,200	18.3	22,000	1,000	15.0	15,000
Carter	3,200	16.0	51,000	2,800	11.5	32,000
Custer	2,300	15.6	36,000	1,500	12.0	18,000
Fallon	4,800	18.1	87,000	3,500	8.6	30,000
Powder River	1,400	18.5	26,000	1,000	13.0	13,000
Rosebud	3,000	13.3	40,000	2,000	8.5	17,000
Treasure	1,200	15.0	18,000	1,400	15.0	21,000
STATE TOTAL	240,000	14.0	3,360,000	192,000	11.0	2,112,000

CORN.

The corn acreage in 1923 was 60 per cent greater than in 1922, the larger part of this expansion taking place in the eastern half of the state. Corn has been planted almost entirely for use as local feed, although not a little of the 1923 crop is finding its way into state marketing channels. Growing conditions were quite favorable for corn, and, although much of it was planted late, delayed frosts in the fall permitted most of it to mature. It is worth noting that corn yields in the eastern counties were little affected by the factors which cut down small grain yields so materially. In the counties which had a considerable acreage of corn, the increase in numbers of hogs and milk cows is most pronounced, and there more stock, including lambs and cattle, is being fattened for market than ever before. About 53 per cent of the 1923 crop was harvested for grain, 2 per cent for silage, and 45 per cent cut for use as fodder, or grazed off in the fields by stock.

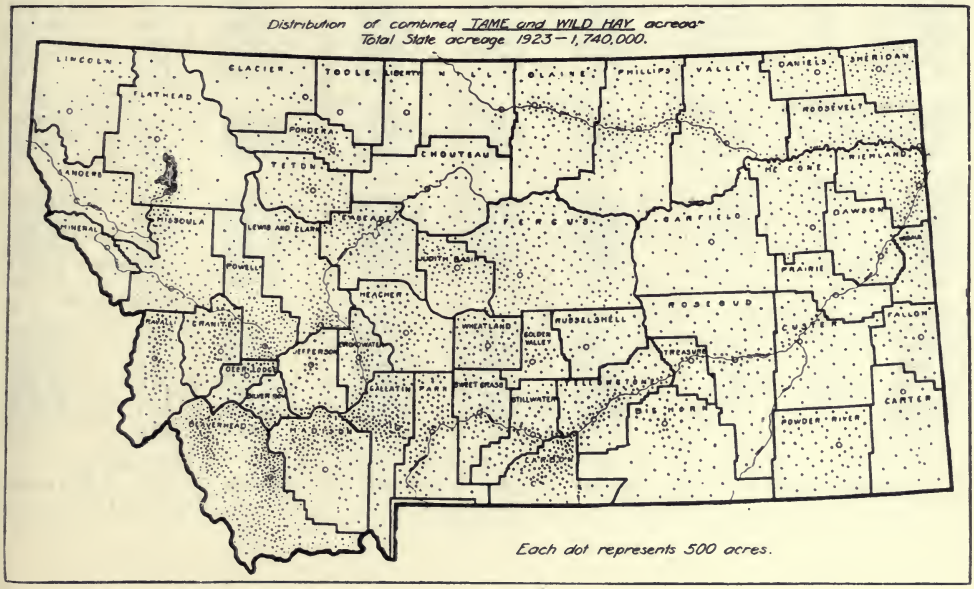
CORN BY COUNTIES—1922 and 1923.

District and County	1922			1923		
	Acreage	Acre Yield (bu.)	Production (bu.)	Acreage	Acre Yield (bu.)	Production (bu.)
NORTHWESTERN						
Flathead	900	22.2	20,000	1,500	26.6	38,000
NORTH CENTRAL						
Blaine	3,400	22.1	75,000	8,000	25.7	206,000
Chouteau	5,800	20.0	116,000	10,000	25.6	254,000
Hill	4,400	20.9	92,000	6,400	23.4	148,000
Liberty	400	20.0	8,000	800	18.7	15,000
Pondera	800	20.0	16,000	2,500	21.2	53,000
Teton	500	20.0	10,000	1,600	25.0	40,000
Toole	.....	.....	.....	400	20.0	8,000
NORTHEASTERN						
Daniels	1,900	21.1	40,000	2,700	24.8	67,000
Phillips	9,000	23.0	207,000	30,000	25.7	770,000
Roosevelt	9,600	23.5	226,000	16,000	25.3	420,000
Sheridan	8,000	23.0	184,000	14,000	24.6	345,000
Valley	5,300	21.9	116,000	15,000	25.7	385,000
WEST CENTRAL						
Missoula	400	22.5	9,000	1,000	26.0	26,000
Ravalli	300	26.7	8,000	400	30.0	12,000
Sanders	400	22.5	9,000	500	26.0	13,000
CENTRAL						
Cascade	1,200	22.5	27,000	5,000	26.6	133,000
Fergus	13,300	22.3	297,000	25,000	27.2	680,000
Golden Valley	4,100	19.3	79,000	6,000	23.0	138,000
Judith Basin	300	23.3	7,000	900	22.2	20,000
Lewis & Clark	500	18.0	9,000	800	23.7	19,000
Musselshell	6,800	21.8	148,000	8,400	22.6	190,000
Wheatland	1,500	20.0	30,000	2,000	23.0	46,000
EAST CENTRAL						
Dawson	12,400	27.9	346,000	16,000	28.1	450,000
Garfield	11,700	22.2	260,000	14,000	25.5	371,000
McCone	9,500	27.1	258,000	13,000	27.3	355,000
Prairie	9,300	27.3	254,000	11,500	28.0	322,000
Richland	17,500	27.0	472,000	27,000	28.2	760,000
Wibaux	4,800	27.1	130,000	6,000	25.7	154,000
SOUTHWESTERN						
Madison	.....	.....	.....	400	20.0	8,000
SOUTH CENTRAL						
Carbon	3,800	23.1	88,000	6,000	30.4	184,000
Gallatin	300	23.3	7,000	500	28.0	14,000
Stillwater	3,500	22.3	78,000	8,000	26.2	210,000
Sweet Grass	500	22.0	11,000	800	25.0	20,000
Yellowstone	16,000	23.5	376,000	23,000	26.8	616,000
SOUTHEASTERN						
Big Horn	3,800	24.2	92,000	6,400	23.8	152,000
Carter	7,600	25.5	194,000	10,000	27.0	270,000
Custer	13,000	26.3	342,000	18,000	25.0	450,000
Fallon	8,400	27.3	229,000	11,000	25.0	275,000
Powder River	9,000	26.0	234,000	10,000	27.3	273,000
Rosebud	11,600	25.0	290,000	18,000	23.5	422,000
Treasure	4,000	24.0	96,000	5,500	25.0	138,000
OTHER COUNTIES	2,500	20.0	50,000	1,000	20.0	20,000
STATE TOTAL	228,000	24.3	5,540,000	365,000	26.0	9,490,000



HAY.

A moderate increase in the hay acreage was noted in 1923, due mainly to more sweet clover, alfalfa, millets, and other hay crops being seeded on non-irrigated lands. In some irrigated sections there were also indications of more land being put into alfalfa and timothy. The production of more hay is in line with the desire to produce more feed crops for local use. The wild hay acreage is fairly constant, moisture conditions in non-irrigated localities controlling to some extent the acreage cut, as well as the yield.



TAME HAY BY COUNTIES—1922 and 1923.

District and County	1922 Acreage	1922 Acre Yield (tons)	1922 Production (tons)	1923 Acreage	1923 Acre Yield (tons)	1923 Production (tons)
NORTHWESTERN						
Flathead	22,000	1.36	30,000	24,000	1.70	40,800
Lincoln	9,000	1.45	13,000	10,000	1.60	16,000
NORTH CENTRAL						
Blaine	20,000	1.65	33,000	19,000	1.74	33,000
Chouteau	16,000	1.26	20,100	13,000	1.38	18,000
Glacier	700	1.29	900	800	1.63	1,300
Hill	7,000	1.37	9,600	6,300	1.43	9,000
Liberty	2,000	1.22	2,400	2,000	1.20	2,400
Pondera	14,000	1.87	26,200	16,500	1.70	28,000
Teton	7,000	1.57	11,000	8,000	1.68	13,400
Toole	1,500	1.00	1,500	1,300	1.15	1,500
NORTHEASTERN						
Daniels	5,000	1.50	7,500	6,000	1.50	9,000
Phillips	22,000	1.96	43,000	24,500	1.72	42,000
Roosevelt	8,000	1.47	11,700	9,000	1.40	12,600
Sheridan	14,000	1.52	21,200	15,000	1.50	22,500
Valley	16,000	1.70	27,200	16,500	1.63	27,000
WEST CENTRAL						
Deer Lodge	7,000	1.86	13,000	7,400	1.82	13,500
Granite	29,000	2.00	58,000	32,000	2.00	64,000
Mineral	1,400	1.72	2,400	1,800	2.22	4,000
Missoula	37,000	1.80	66,600	41,000	2.54	104,000
Powell	39,000	1.84	71,700	40,000	1.68	67,000
Ravalli	36,000	2.42	87,000	37,600	2.13	80,200
Sanders	12,000	1.70	20,400	14,000	2.00	28,000
CENTRAL						
Broadwater	18,000	2.08	37,400	19,400	2.37	46,000
Cascade	37,000	1.62	60,000	40,000	1.73	69,000
Fergus	52,000	1.44	75,000	55,000	1.76	97,000
Golden Valley	7,600	1.65	12,500	8,400	1.70	14,300
Jefferson	13,000	1.86	24,200	13,400	2.00	26,800
Judith Basin	25,000	1.60	40,000	26,000	1.65	42,800
Lewis & Clark	30,000	1.80	54,000	33,000	1.70	56,000
Meagher	16,000	1.69	27,000	16,800	1.55	26,000
Musselshell	7,000	1.43	10,000	7,600	1.32	10,000
Wheatland	16,000	1.60	25,500	16,600	1.50	25,000
EAST CENTRAL						
Dawson	8,000	1.50	12,000	9,200	1.10	10,000
Garfield	15,000	1.39	20,800	15,000	1.33	20,000
McCone	13,000	1.42	18,400	14,500	1.34	19,500
Prairie	4,000	1.51	6,000	4,500	1.31	5,900
Richland	22,000	1.82	40,000	22,000	1.55	34,000
Wibaux	6,000	1.51	9,000	6,000	1.20	7,200
SOUTHWESTERN						
Beaverhead	46,000	1.93	89,000	47,000	2.43	114,000
Madison	54,000	2.15	116,000	55,000	2.44	134,000
Silver Bow	5,200	1.85	9,600	5,400	1.82	9,800
SOUTH CENTRAL						
Carbon	44,000	2.30	101,000	43,000	2.68	115,000
Gallatin	52,000	3.12	162,000	53,000	2.40	127,200
Park	41,000	2.13	87,300	41,000	2.00	82,000
Stillwater	22,000	1.92	42,200	23,000	1.50	34,500
Sweet Grass	22,000	1.94	42,700	22,000	2.00	44,000
Yellowstone	43,000	2.02	87,000	45,000	2.00	90,000
SOUTHEASTERN						
Big Horn	23,000	2.22	51,000	23,000	1.87	43,000
Carter	5,000	1.54	7,700	4,500	1.22	5,500
Custer	19,600	1.68	33,000	19,000	1.18	22,500
Fallon	5,000	1.88	9,400	5,000	1.36	6,800
Powder River	19,000	1.84	35,000	19,500	1.38	27,000
Rosebud	20,000	1.83	36,600	20,000	1.30	26,000
Treasure	9,000	1.80	16,200	8,500	1.88	16,000
STATE TOTAL	1,045,000	1.89	1,975,000	1,087,000	1.88	2,044,000

WILD HAY BY COUNTIES—1922 and 1923.

District and County	1922 Acreage	1922 Acre Yield (tons)	1922 Production (tons)	1923 Acreage	1923 Acre Yield (tons)	1923 Production (tons)
NORTHWESTERN						
Flathead	13,000	.50	6,500	14,000	.80	11,200
Lincoln	1,400	.55	800	1,600	.81	1,300
NORTH CENTRAL						
Blaine	23,000	1.04	24,000	23,000	.93	21,400
Chouteau	8,000	.60	4,800	7,500	.76	5,700
Glacier	12,000	.63	7,500	11,000	.75	8,200
Hill	4,000	.70	2,800	4,000	.75	3,000
Liberty	4,000	.62	2,500	3,600	.56	2,000
Pondera	5,000	.72	3,600	5,000	.84	4,200
Teton	18,000	.72	13,000	21,000	.80	16,800
Toole	500	.60	300	500	.80	400
NORTHEASTERN						
Daniels	5,000	.90	4,500	4,400	.68	3,000
Phillips	34,000	.94	32,000	32,000	1.00	32,000
Roosevelt	20,000	.85	17,000	19,000	.79	15,000
Sheridan	16,000	.90	14,400	15,800	.82	13,000
Valley	20,000	.90	18,000	20,500	.78	16,000
WEST CENTRAL						
Deer Lodge	5,000	1.04	5,200	5,000	1.00	5,000
Granite	4,500	1.11	5,000	4,600	1.00	4,600
Mineral	200	1.00	200	200	1.00	200
Missoula	2,500	.88	2,200	2,600	.89	2,300
Powell	26,000	.92	24,000	26,000	.97	25,200
Ravalli	1,500	1.07	1,600	1,800	1.06	1,900
Sanders	2,000	.70	1,400	2,000	.90	1,800
CENTRAL						
Broadwater	6,000	1.12	6,700	6,500	1.15	7,500
Cascade	5,000	.90	4,500	5,000	1.00	5,000
Fergus	16,000	.82	13,000	16,000	.90	14,400
Golden Valley	2,700	.85	2,300	3,000	.80	2,400
Jefferson	8,000	1.00	8,000	7,700	.91	7,000
Judith Basin	12,000	.85	10,200	12,000	.90	10,800
Lewis & Clark	12,000	1.00	12,000	12,000	.95	11,400
Meagher	16,000	1.10	17,500	16,500	1.12	18,500
Musselshell	4,000	.85	3,400	3,500	.69	2,400
Wheatland	9,000	.90	8,100	9,700	.93	9,000
EAST CENTRAL						
Dawson	9,000	.90	8,100	9,000	.78	7,000
Garfield	4,000	.85	3,400	4,000	.70	2,800
McCone	11,500	.92	10,600	10,000	.65	6,500
Prairie	4,000	.90	3,600	3,600	.56	2,000
Richland	17,000	.85	14,400	16,400	.58	9,500
Wibaux	5,000	.90	4,500	4,600	.57	2,600
SOUTHWESTERN						
Beaverhead	184,000	.90	165,000	184,000	1.05	193,000
Madison	22,000	1.05	23,000	23,000	1.06	24,400
Silver Bow	5,000	1.00	5,000	5,000	1.00	5,000
SOUTH CENTRAL						
Carbon	2,000	.90	1,800	2,000	.90	1,800
Gallatin	16,000	1.06	17,000	16,000	1.04	16,600
Park	4,000	1.00	4,000	4,000	1.05	4,200
Stillwater	4,000	.75	3,000	4,000	.75	3,000
Sweet Grass	3,000	1.00	3,000	3,000	.93	2,800
Yellowstone	3,500	.86	3,000	3,500	.86	3,000
SOUTHEASTERN						
Big Horn	9,000	1.11	10,000	8,500	.68	5,800
Carter	9,000	.78	7,000	7,000	.64	4,500
Custer	8,000	.81	6,500	7,000	.50	3,500
Fallon	6,500	1.00	6,500	6,000	.67	4,000
Powder River	10,000	1.04	10,400	9,000	.61	5,500
Rosebud	6,000	1.00	6,000	5,400	.56	3,000
Treasure	1,200	1.00	1,200	1,000	.90	900
STATE TOTAL	660,000	.90	594,000	653,000	.91	594,000

TAME HAY BY VARIETIES—1919-1923.

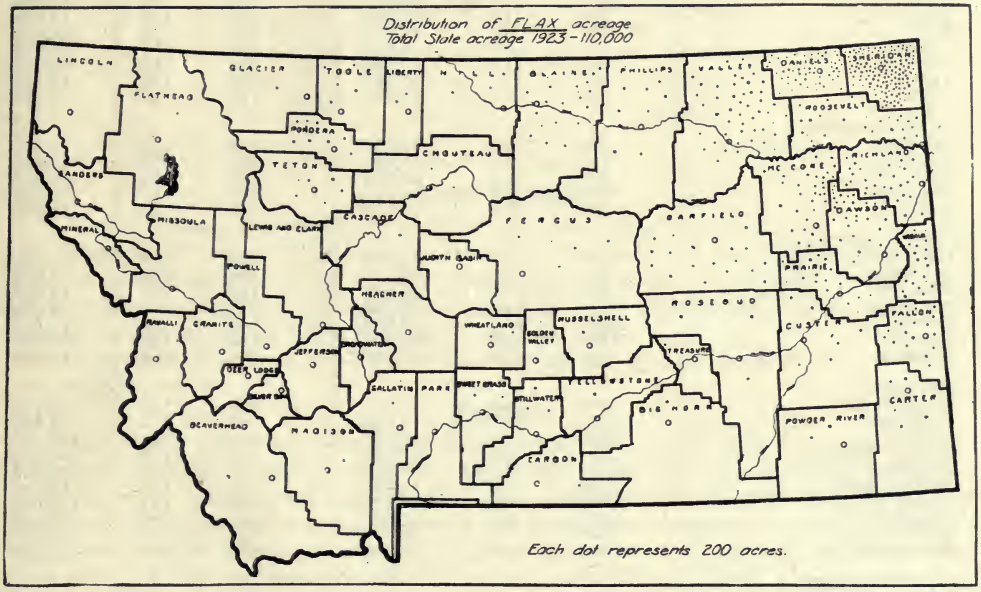
	Acreage	Yield Per Acre Tons	Production Tons
ALFALFA HAY			
1923	505,000	2.15	1,086,000
1922	486,000	2.20	1,069,000
1921	466,000	2.25	1,048,000
1920	424,000	2.15	912,000
1919	374,000	1.70	636,000
TIMOTHY HAY			
1923	83,000	1.63	135,000
1922	83,000	1.50	124,000
1921	81,000	1.40	114,000
1920	90,000	1.50	135,000
1919	81,000	.80	65,000
MIXED CLOVER & TIMOTHY HAY			
1923	156,000	2.00	312,000
1922	150,000	1.90	285,000
1921	154,000	1.70	262,000
1920	140,000	1.80	252,000
1919	116,000	1.10	128,000
GRAIN cut green for hay			
1923	197,000	1.37	270,000
1922	195,000	1.40	273,000
1921	202,000	1.20	242,000
1920	313,000	1.15	360,000
1919	467,000	.45	210,000
CLOVER HAY			
1923	52,000	1.80	94,000
1922	45,000	1.80	81,000
1921	44,000	1.60	70,000
1920	42,000	1.60	67,000
1919	38,000	1.05	40,000
MILLETT and Miscel. Tame Hay			
1923	94,000	1.54	145,000
1922	86,000	1.64	141,000
1921	98,000	1.37	134,000
1920	96,000	1.44	138,000
1919	82,000	.87	71,000

FLAX BY COUNTIES—1922-1923

District and County	1922 Acreage	1922 Acre Yield (bu.)	1922 Production (bu.)	1923 Acreage	1923 Acre Yield (bu.)	1923 Production (bu.)
NORTH CENTRAL						
Blaine	3,200	5.0	16,000	4,000	9.5	38,000
Chouteau	400	3.2	1,300	.....	...	.....
Glacier	500	6.6	3,300	1,400	5.0	7,000
Hill	700	4.8	3,400	500	6.0	3,000
Liberty	700	4.7	3,300	300	5.3	1,600
Pondera	1,100	7.5	8,200	1,700	7.0	12,000
Teton	900	6.7	6,000	1,000	8.5	8,500
Toole	1,100	4.8	5,300	1,000	4.5	4,500
NORTHEASTERN						
Daniels	11,200	6.2	69,500	13,000	9.0	117,000
Phillips	1,800	5.3	9,500	1,700	7.5	12,700
Roosevelt	4,200	7.8	32,800	5,400	7.7	41,600
Sheridan	21,000	8.3	174,000	30,000	8.8	264,000
Valley	9,100	5.4	49,400	9,500	8.6	82,000
CENTRAL						
Cascade	200	8.0	1,600	.....	.....	.....
Fergus	700	7.6	5,300	900	10.5	9,500
Golden Valley	400	6.7	2,700	300	6.7	2,000
Musselshell	.....	...	.....	400	10.5	4,200
Wheatland	300	7.6	2,300	400	8.7	3,500
EAST CENTRAL						
Dawson	3,600	8.5	30,600	6,000	7.0	42,000
Garfield	2,800	7.8	21,800	3,500	12.0	42,000
McCone	3,400	8.4	28,600	7,000	8.2	57,400
Prairie	1,800	7.4	13,300	2,500	8.0	20,000
Richland	5,100	7.5	38,300	6,300	6.3	40,000
Wibaux	2,500	7.6	19,000	3,500	7.1	25,000
SOUTH CENTRAL						
Stillwater	600	7.0	4,200	600	7.5	4,500
Sweet Grass	400	7.5	3,000	400	7.5	3,000
SOUTHEASTERN						
Carter	600	10.0	6,000	1,000	6.8	6,800
Custer	800	9.0	7,200	1,400	6.0	8,400
Fallon	2,200	9.4	20,700	3,600	5.3	19,000
Powder River	200	8.0	1,600	400	8.5	3,400
Rosebud	500	7.6	3,800	500	9.5	4,700
OTHERS	2,000	6.5	13,000	1,800	8.2	14,700
STATE TOTAL	84,000	7.2	605,000	110,000	8.5	902,000

FLAX.

Favorable market values and the farmers' need for cash caused an expansion in the acreage devoted to flax in 1923. Most of the state's flax is grown in the northeast quarter of the state, but a small amount is scattered over most of the plains area, except the central and south central sections. The factors which affected wheat so adversely in the east did less injury to the flax, and yields were fairly good, in fact the best since 1916. Market prices held up so that some profit was realized from flax sales, and there promises to be a heavy increase in the flax acreage in 1924.



POTATOES.

A decided reduction in the acreage of commercial potatoes occurred in 1923, less marked in Ravalli, Flathead, and Blain counties than in others. The major part of the commercial potato fields are located in the western counties. Average yields in 1923 were not up to average, even on irrigated lands. Growers are giving more attention to the use of good seed, and to the production of certified seed for local and outside markets. The results of the past two years indicate an expansion in this field.

CARLOT SHIPMENTS OF MONTANA POTATOES.

1923	574	(to Apr. 12, 1924)
1922	1061	(to Apr. 14, 1923)
1922	1412	(total shipments)
1921	1838	(total shipments)
1920	932	(total shipments)

POTATOES BY COUNTIES—1922 and 1923.

District and County	1922 Acreage	1922 Acre Yield (bu.)	1922 Production (bu.)	1923 Acreage	1923 Acre Yield (bu.)	1923 Production (bu.)
NORTHWESTERN						
Flathead	4,500	127	571,000	3,500	100	350,000
Lincoln	900	112	101,000	700	90	63,000
NORTH CENTRAL						
Blaine	600	97	58,000	600	120	72,000
Chouteau	600	99	59,000	500	90	45,000
Glacier	200	115	23,000	200	100	20,000
Hill	450	94	42,000	400	90	36,000
Liberty	100	90	9,000	100	100	10,000
Pondera	550	111	61,000	500	130	65,000
Teton	500	108	54,000	500	120	60,000
Toole	150	93	14,000	150	80	12,000
NORTHEASTERN						
Daniels	350	108	38,000	300	90	27,000
Phillips	700	114	80,000	600	92	55,000
Roosevelt	600	112	67,000	550	69	38,000
Sheridan	850	110	94,000	800	70	56,000
Valley	900	105	95,000	700	74	52,000
WEST CENTRAL						
Deer Lodge	1,100	148	163,000	900	138	124,000
Granite	350	132	46,000	300	133	40,000
Mineral	150	134	20,000	150	120	18,000
Missoula	1,500	103	155,000	1,100	90	99,000
Powell	1,600	144	230,000	1,100	110	121,000
Ravalli	3,200	150	480,000	2,100	140	294,000
Sanders	900	116	105,000	800	100	80,000
CENTRAL						
Broadwater	450	136	61,000	450	145	65,000
Cascade	1,200	120	144,000	900	114	103,000
Fergus	1,700	83	141,000	1,400	121	169,000
Golden Valley	350	86	30,000	300	107	32,000
Jefferson	1,400	150	210,000	1,000	145	145,000
Judith Basin	500	88	44,000	500	110	55,000
Lewis & Clark	1,900	152	290,000	1,400	124	174,000
Meagher	500	104	31,000	250	100	25,000
Musselshell	400	95	38,000	300	83	25,000
Wheatland	400	95	38,000	350	100	35,000
EAST CENTRAL						
Dawson	700	110	77,000	600	72	43,000
Garfield	700	96	67,000	600	79	47,000
McCone	600	103	62,000	600	75	45,000
Prairie	300	107	32,000	300	73	22,000
Richland	1,400	140	196,000	1,000	85	85,000
Wibaux	500	120	60,000	400	75	30,000
SOUTHWESTERN						
Beaverhead	600	142	85,000	500	146	73,000
Madison	1,600	178	285,000	1,200	155	186,000
Silver Bow	200	90	18,000	200	100	20,000
SOUTH CENTRAL						
Carbon	1,600	130	208,000	1,150	130	150,000
Gallatin	1,300	153	199,000	800	144	115,000
Park	600	150	90,000	450	178	80,000
Stillwater	500	146	73,000	450	122	55,000
Sweet Grass	450	140	63,000	350	150	52,000
Yellowstone	1,600	134	214,000	1,300	134	174,000
SOUTHEASTERN						
Big Horn	450	120	54,000	350	109	38,000
Carter	250	112	28,000	250	76	19,000
Custer	750	120	90,000	600	67	40,000
Fallon	550	116	64,000	500	56	28,000
Powder River	250	111	28,000	250	72	18,000
Rosebud	500	112	56,000	500	94	47,000
Treasure	350	115	29,000	250	112	28,000
STATE TOTAL	45,000	126	5,670,000	36,000	111	3,960,000

APPLES.

About 90 per cent of our apples are produced west of the Continental Divide, and there conditions favored the production of a large crop in 1923. But there is a considerable number of neglected orchards; diseases were worse than usual, and rare hail storms did a great amount of injury to the fruit in Ravalli county, so that the amount of fancy and high grade apples was comparatively small. Most of the apples sold from Carbon county orchards are now sold locally or trucked out to nearby towns.

MONTANA COMMERCIAL APPLE PRODUCTION.

Crop Year	Total Crop (bushels)	Commercial Crop (boxes)	Cars Shipped of this Crop
1923	990,000	369,000	440*
1922	610,000	300,000	351
1921	975,000	521,000	687

*Partly estimated.

OTHER FRUITS.

Next to apples, cherries constitute Montana's most important fruit crop. Practically all of them are raised in counties west of the Divide. The large sweet cherries of the Flathead region, and the canning cherries of the Bitter Root Valley, are worthy of mention as important sources of farm income. A considerable expansion in the number of cherry trees of both types took place in 1923.

Small fruit and pears are locally important in the western counties also, and some are shipped out.

BEANS.

The acreage planted to beans increased several hundred per cent over that of 1922. The Great Northern variety is grown almost exclusively for sale. Most of the 1923 acreage was in Yellowstone, Carbon, Big Horn and Stillwater counties, but many other counties give promise of having comparatively large bean acreages in 1924. The beans are grown on both irrigated and non-irrigated land, and the 1923 average yields were very good. Market prices were such that growers would have realized a very satisfactory profit on the crop had not unusually persistent fall rains caused severe injury to most of the crop which was not yet threshed.

SUGAR BEETS.

The sugar beet acreage in 1923 was increased greatly over that for 1922. Montana beets are grown chiefly in Yellowstone, Carbon, Stillwater, Big Horn, Treasure, and Richland counties. Approximately 25,000 acres were grown in 1923. The average yield per acre was close to 11 tons, and the returns netted a profit to growers. Several thousand head of cattle, sheep, and lambs were fattened during the past winter around Billings, the wet pulp from the Billings sugar factory forming the basis of the fattening ration. This feeding industry is only one of the direct advantages resulting from sugar beet production. There apparently will be considerable expansion in the acreage for 1924, including more extensive trial plantings in the Milk River Valley and on the Sun River Project which were begun in 1923.

ALFALFA SEED.

The alfalfa seed crop for 1923 was fairly satisfactory in the southeast fourth of the state, both as to yield and prices received. The production in the northern counties along the Milk River was cut down on account of the June floods and grasshoppers, while the conditions were unfavorable to good yields in Sanders county. Most of the crop last year was produced in localities more or less distant from shipping points, such as in Garfield, Big Horn, Rosebud, and Powder River counties. This crop possesses a distinct advantage for such localities, because of its relatively low bulk and high value. Under continuing favorable markets alfalfa seed production will probably increase.

SEED AND CANNING PEAS.

Several companies contract with farmers to grow seed peas each year, and this is one of the important crops in some counties. Most of the seed peas are grown in the irrigated valleys of the south central, southwestern, and western districts. Growing conditions were not the best in 1923, and hail damaged peas in several localities, so the average yield per acre was much lower than usual. There are several advantages to farmers in growing this crop, and the excellent quality of seed produced seems to insure a moderate increase in acreage.

Peas for canning were grown in Gallatin and Ravalli counties, and good profits were generally reported from this crop, besides the obvious value resulting from growing it in rotation with other crops. There are also indications of expansion in the canning pea acreage.

MISCELLANEOUS CROPS.

Among the miscellaneous crops of importance that are grown should be mentioned sweet clover seed, timothy seed, sunflowers for silage, melons, cucumber seed, vegetables and truck crops. Not a few farmers secure the main part of their cash income from the seed crops.

ESTIMATED AVERAGE YIELDS PER ACRE ON IRRIGATED, NON-IRRIGATED LANDS, AND FOR ENTIRE STATE—1923.

	MONTANA.			UNITED STATES
Crops	Irrigated	Non-Irrigated	Ave. for State	Average
Winter Wheat	26.0 Bus.	16.9 Bus.	17.0 Bus.	14.5 Bus.
Spring Wheat	24.0 Bus.	14.1 Bus.	14.3 Bus.	11.4 Bus.
Oats	46.0 Bus.	30.0 Bus.	33.0 Bus.	31.8 Bus.
Barley	35.0 Bus.	23.0 Bus.	25.5 Bus.	25.1 Bus.
Rye	16.0 Bus.	10.9 Bus.	11.0 Bus.	12.2 Bus.
Flax	12.0 Bus.	8.2 Bus.	8.2 Bus.	8.5 Bus.
Corn	38.0 Bus.	25.5 Bus.	26.0 Bus.	29.3 Bus.
Potatoes	147.0 Bus.	90.0 Bus.	110.0 Bus.	108.1 Bus.
Beans	23.0 Bus.	11.5 Bus.	18.0 Bus.	12.1 Bus.
Alfalfa Hay	3.00 Tons	1.30 Tons	2.15 Tons	2.63 Tons
All Tame Hay	2.30 Tons	1.50 Tons	1.88 Tons	1.48 Tons
Wild Hay	1.15 Tons	.75 Tons	.91 Tons	1.11 Tons
Corn Silage	7.50 Tons	4.10 Tons	5.00 Tons	..... Tons
Sugar Beets	11.0 Tons	..... Tons	11.0 Tons	10.59 Tons

AVERAGE WAGES OF MALE FARM LABOR IN MONTANA

	Per Month		Per Day at Harvest		Per Day Other Than Harvest	
	With Board	Without Board	With Board	Without Board	With Board	Without Board
1910	$38.00	$50.00	$ 2.05	$ 2.80	$ 1.77	$ 2.66
1922	42.20	63.00	3.60	4.40	2.40	3.20
1923	48.00	65.50	3.60	4.52	2.70	3.55
United States 1923	33.18	46.91	2.45	3.03	1.93	2.47

MONTANA'S AREA—Montana ranks third in area of all the states. It averages 275 miles in width from north to south, and 535 miles in length. It contains 94,078,080 acres, of which 589,440 acres are water surface. The land of the state has been roughly classified into: Farming land, 30,000,000 acres; mountain and forest lands, 26,000,000 acres; and grazing land, 37,000,000 acres.

IRRIGATED AREAS IN MONTANA

(From U. S. Bureau of the Census)

INDEX

Pages

ACREAGE 16, 19, 20

ALFALFA—See crops .....

APPLES—See crops .....

ASSESSED VALUATIONS 19

BARLEY 26

BEANS 35

BEEF CATTLE 3, 8, 10

- Shipments from Montana 8
- Output of (graph) 8
- Distribution of 10

BEES AND HONEY 3

CALF AND LAMB CROPS 5

CORN 28–29

CROPS 15–36

- Alfalfa Seed 35
- Apples 35
- Average yield per acre 36
- Barley 26
- Beans 35
- Changes in average acreage per farm of (graph) 20
- Corn 28–29
- Flax 32–33
- General Summary of 17
- Hay 29–32
- Miscellaneous crops 36
- Montana's rank with other states 18
- Net returns from 15
- Oats 24–25
- Other fruits 35
- Percentages sold of, 1923 17
- Potatoes 33–34
- Relative acreages of, 1923 (graph) 16
- Relative importance of, 1923 (graph) 18
- Reporting districts, map of ..... Inside front cover
- Rye 27
- Seed and canning peas 36
- Sugar beets 35
- Total cropped area 15
- Total farm value of all crops produced, 1923, by counties (graph) 14
- Trend of acreage of principal crops (graph) 19
- Wheat 21–24

Pages

DAIRYING 4, 7, 8
- Distribution of milk cows (map) 7
- Location of creameries and cheese factories (map) 7
- Manufactured dairy products 8
- Milk cows and dairying 4
- Number of milk cows by counties 7

FLAX 32–33

FOREWORD 2

HAY 29–32

HOGS 3
- Distribution of 11

HORSES 4–6

IRRIGATED AREAS 37

LABOR, wages of, on farms 36

LANDS 19–20
- Assessed valuation 19
- Plow lands, value of 20

LIVESTOCK 3–13
- Beef cattle 3
- Beef cattle, distribution of (map) 10
- Bees and Honey 3
- Calf and lamb crops, and losses of cattle and sheep 5
- Cattle shipments from Montana 8
- Cattle output 1885-1923 (graph) 8
- Combined receipts from, and products sold and value of all crops produced in 1923, by counties (graph) 13
- Farm receipts of (graph) 9
- Gross farm receipts from farms and ranches, 1923 11
- Hogs 3
- Hogs, distribution of (map) 11
- Horses 4
- Income from and products sold 11
- Location of creameries and cheese factories 7
- Manufactured dairy products 8
- Milk cows and dairying 4
- Milk cows, distribution of (map) 7
- Montana wool production 5
- Number of milk cows by counties 7
- Numbers and values of 5
- Number of horses, cattle and sheep by counties 6
- Poultry 4
- Receipts by counties of, and products sold, 1923 (graph) 12
- Sheep 3
- Sheep, distribution of (map) 10

Pages

LOSSES OF CATTLE AND SHEEP 5

MILK COWS—See Dairying

MONTANA—

Rank in crops 18

Relative importance of crops 18

OATS 24–25

ORCHARDS 38

POTATOES 33–34

POULTRY 4

PRODUCTION, See livestock, crops

RYE 27

SEED CROPS 36

SHEEP 3

Distribution of (map) 10

SUGAR BEETS 35

WHEAT 21, 22, 23, 24

WOOL 5

MISSOULIAN PUB. CO. MISSOULA MONTANA